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FISCAL YEAR 1990

PENNSYLVANIA

FALL 1989

Commonwealth of Pennsylvania
Robert P. Casey, Governor

Department of Labor & Industry

Bureau of Research & Statistics

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF LABOR AND INDUSTRY
BUREAU OF RESEARCH AND STATISTICS

ANNUAL PLANNING INFORMATION REPORT FOR PENNSYLVANIA

Annual publication containing economic and demographic statistics and analysis for use in planning and administering job development and training programs.

ISSUED: FALL 1989

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P R E F A C E

The Annual Planning Information Report (APIR) is designed to provide basic statistical data and analyses to aid planners who are in need of socioeconomic information, particularly as related to job development and training programs. Users of this report are perceived to be planners and administrators; vocational educators; state and local officials; business, labor and other community groups. The report includes information on employment and unemployment; wages and earnings of production workers in manufacturing; population demographics; job openings received by local offices of Job Service; and occupational employment trends.

An Annual Planning Information Report is prepared for the State, each Primary Metropolitan Statistical Area (PMSA), and each Metropolitan Statistical Area (MSA). All reports are available by contacting state or area labor market analysts.

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SECTION I

HIGHLIGHTS

A. Highlights of the Report

STATE EMBODIES FORTY LABOR MARKET AREAS

Pennsylvania is divided into 67 counties which comprise 40 labor market areas, twelve of which are designated Metropolitan Statistical Areas (MSAs) while three are termed Primary Metropolitan Statistical Areas (PMSAs).

PENNSYLVANIA POPULATION PROJECTED TO GROW

It is projected that Pennsylvania's population will grow to 12,018,816 by 1990, up 154,096 from 1980. The greatest loss in the state's population is projected to occur in the 5-24 age group, while the most gains are in the 25-44 age group.

MINORITIES AND YOUTH CONTINUE TO FACE EMPLOYMENT PROBLEMS

During 1988, Pennsylvania's labor force averaged 5,780,000. Of this total, 294,000 were out of work and seeking employment yielding a state average unemployment rate of 5.1 percent. Youth 16 to 19 years of age displayed an unemployment rate of 13.9 percent, more than twice the rate for all persons. The total minority group also suffered relatively high levels of joblessness during 1988 with a rate of 10.0 percent.

MANUFACTURING JOBS DECLINE; THOSE IN NONMANUFACTURING CONTINUE TO GROW

Over the 1978-1988 period, the Pennsylvania Metropolitan areas' manufacturing industries lost 288,600 jobs while nonmanufacturing employment soared by 583,900. Durable goods industries bore the brunt of manufacturing losses while, in nonmanufacturing, job gains were concentrated in the service industries, wholesale and retail trade as well as finance, insurance and real estate.

NONAGRICULTURAL EMPLOYMENT EXPECTED TO RISE

Nonagricultural wage and salary employment statewide is expected to reach 5,102,000 by 1995. This represents an increase of 362,900 jobs from 1985 as compared with an increase of 300,100 jobs between 1975 and 1985.

COMMONWEALTH PER CAPITA INCOME UP 6.7 PERCENT IN 1988

Dividing total personal income for a year by the state's total resident population yields per capita personal income. During 1988 Pennsylvania's per capita income averaged $16,233 reflecting a rise of 6.7 percent since 1987 and placing the state twentieth among all states in the nation. The 1988 United States average was $16,489.

PHILADELPHIA PMSA SHOWS HIGHEST AVERAGE ANNUAL WAGE

At $24,236 in 1988, the Philadelphia PMSA posted the highest average annual wages among the state's 15 Metropolitan Statistical Areas. The Pittsburgh PMSA and Reading MSA followed with wages of $21,946 and 21,156 respectively. These data are based on total payroll of UC-insured workers and federal government employes divided by the total number of employes.

EMPLOYMENT POTENTIAL HIGH FOR NURSES AND CASHIERS

Based on their ability to generate hiring potential during the 1980s, the occupations of professional nurse and cashier led all others in Pennsylvania. This is not surprising as nurses are found throughout all industries within the expanding health field while cashiers are found in most sales related industries.

PUBLIC AND NON-PUBLIC SCHOOL ENROLLMENT CONTINUES TO DECLINE

During the period 1973 through 1989 public school enrollment has declined steadily, down a net 702,950 or 30 percent. Despite two yearly increases during the 16 year period, enrollment among Pennsylvania's non-public schools shows a net loss of 106,038 or 23 percent.

JOB SERVICE FILLS 132,294 JOB OPENINGS

In the twelve-month period ending June 30, 1989, Job Service offices received a total of 195,786 job openings. Of these, 132,294 were filled. Service occupations comprised the largest group of openings filled. A total of 591,980 applicants registered for work at Job Service offices during the year.

STATE UNEMPLOYMENT LOWEST SINCE 1974

Unemployment among Pennsylvania residents fell to 294,000 during 1988, a drop of 26,000 over the year. This is the lowest number of unemployed since 1974 and represents 5.1 percent of the 1988 civilian labor force.

B. Highlights--Pennsylvania's State Profile:

Labor Market Trends Through Year 2000

Pennsylvania's total population is projected to grow 2 percent from 1980 to 2000 to a level of 12,081,000 1/

- by 2000, the working age group (25-44), will represent approximately 29 percent of the total population, up from the 26 percent in 1980 1/

- the 15-24 age group will decline by 36 percent in the 20 years from 1980 to 2000 1/

- those 65 and over, who accounted for 12.9 percent of the total population in 1980, will make up 15.7 percent of the population in 2000 and will increase in numbers by more than 23 percent 1/

- females 25-54, (prime child bearing and child rearing ages) will increase 10 percent from 1980 to 2000, compared to 35 percent growth nationwide 1/ 2/

Through the 1990s and into the year 2000, the labor force is projected to grow, although at a slower rate than in the 1980s, in Pennsylvania and the United States 3/ 4/

- the labor force is projected to reach a level of 5.95 million by the year 2000 4/

- labor force growth will be due mostly to expansion of the working age population (35-54) and a larger proportion of women in the work place 1/ 4/

- the median workers' age will rise to 39.8 years in 2000 from 36.3 years in 1980 4/

- with the number of youth (15-24) projected to decline, youth unemployment should decline and competition for entry level jobs will decrease 4/

- by the year 2000, approximately 48.0 percent of Pennsylvania's labor force will be women, a proportion similar to that of the nation 4/

Barring unforeseen economic or social developments, unemployed Pennsylvanians are expected to decline to 310,000 by the year 2000, a drop of approximately 132,000 from 1985 4/

- the unemployment rate is expected to fall from the 1985 average of 8.0 percent to 5.2 percent in the year 2000 4/

During 1985 the number of nonagricultural wage and salary jobs in Pennsylvania firms totaled 4,739,100 and is projected to rise to 5,288,000 by the year 2000 4/

- this represents a 15 year job rise of 548,900 or 11.6 percent 4/

- service producing sector which includes all industries except manufacturing, mining and contract construction is expected to increase by 721,700 jobs or 21.1 percent from 1985 to the year 2000 4/

    - these job gains will be most prevalent in services (up 413,000 or 35.3 percent), especially health, personal and business services 4/

    - trade (up 224,500 or 21.0 percent) mostly in retail trade (up 174,300) and concentrated in eating and drinking places 4/

    - finance, insurance, and real estate (FIRE) up 62,500 jobs or 23.8 percent from 1985 to 2000 4/

- goods producing sector which includes mining, contract construction and manufacturing is projected to lose 172,800 jobs or down 13.1 percent in the next 15 years and total 1.1 million by the year 2000 4/

- manufacturing industries are expected to lose payroll employment of 194,900 jobs by 2000 with durable goods segment accounting for three-fourths of the loss 4/

- mining is projected to lose 4,300 jobs down 11.9 percent from 1985 to the year 2000 dropping to an employment level of 32,000 4/

- contract construction industry is expected to grow by 26,400 jobs or 13.9 percent and reach a level of 216,000 by the year 2000 4/

Nationwide, service-producing industries are projected to account for nine out of ten new jobs from the mid 1980s to the mid 1990s 3/

According to U.S. Bureau of Labor Statistics, almost half of the 20 fastest growing occupations are in the computer field or health care field; these broad occupational groupings will continue rapid growth through the 1990s 3/

- among occupations within the computer field with expected strong future growth are: computer operators including peripheral equipment operators, computer system analysts, and data processing equipment repairers 3/ 4/

- among occupations within the health care field with expected future strong growth are: medical assistants, dental assistants, speech & hearing clinicians, and physical therapists 3/ 4/

SOURCE:

1. Pennsylvania Population Projections, 1980-2000, Pennsylvania State Data Center, Pennsylvania State University, Capitol Campus, January 1986

2. U.S. Department of Commerce, Bureau of Census, Series P-25, No. 937

3. U.S. Department of Labor, Bureau of Labor Statistics

4. Pennsylvania Department of Labor and Industry, Bureau of Research and Statistics

NOTE:

Information in this Section was primarily obtained from Pennsylvania Workforce 2000 report, reprinted in Spring 1988.

SECTION II

POPULATION AND LABOR FORCE CHARACTERISTICS AND TRENDS

A. Definition of Area

The Commonwealth of Pennsylvania, the Keystone State, is in the Middle Atlantic Region of the United States and is bordered by six states: New York on the north and northeast; New Jersey on the east; Delaware and Maryland on the south; West Virginia on the south and west; and Ohio on the west. The Delaware River on the east separates the Commonwealth from New Jersey and southeastern New York. In the northwest, Lake Erie provides 51 miles of coastline.

Pennsylvania measures 307 miles by 169 miles at its widest points and has a total land area of 45,333 square miles. The State ranks thirty-third in land area out of the 50 states. The Appalachian Mountain Range crosses Pennsylvania diagonally from northeast to southwest and covers almost three quarters of the entire state. Mount Davis in Somerset County is the highest peak at 3,213 feet.

Pennsylvania's resident population of 11,864,720 for 1980, yields a density of 262 people per square mile and is the home of 5.2 percent of the U.S. population. According to 1980 census data, Pennsylvania's population is 69.3 percent urban and 30.7 percent rural. The Commonwealth is divided into 67 counties which make up 40 labor market areas including 12 Metropolitan Statistical Areas (MSAs) and 3 Primary Metropolitan Statistical Areas (PMSAs) and has an estimated 1988 population of 12,002,060.

Pennsylvania has an excellent highway system which provides easy access to major marketing areas and seaports. There are 42,000 miles of state administered paved roads in Pennsylvania, more than in New Jersey and all of New England combined. The Pennsylvania Turnpike, the first turnpike in the U.S., connects the major metropolitan areas of Philadelphia and Pittsburgh.

Farmland comprises one-third, 8.5 million acres, of Pennsylvania's total land. Pennsylvania leads the nation in the production of mushrooms, potato chips, pretzels, and the number of meat slaughterhouses and licensed bakeries. The state ranks second in the production of ice cream, sherbet and frozen dairy products, egg-type chickens hatched and poultry processing plants; ranks third in the production of veal, eggs, and layer chickens; ranks fourth in the production of Italian cheese, grapes, silage corn, cut flowers and potted flowering plants. Pennsylvania's milk production ranks fifth in the nation.

Philadelphia, the largest city in Pennsylvania and the fourth largest in the U.S., is rich in the history of the American Revolution. Located on the Delaware River in the southeast section of the state, Philadelphia is the world's largest freshwater port and also a large oil refining center.

Pittsburgh, the state's second largest city, is located in southwestern Pennsylvania where the Allegheny and Monongahela Rivers meet to form the Ohio River. Universally known for its production of steel, Pittsburgh is also the largest inland port in the United States, its goods reaching the Mississippi via the Ohio River.

Erie, situated in the northwest on the shore of the Great Lake of the same name, is the third largest city. Erie has also become an important port, making it a favorable location for industry. The Great Lakes and St. Lawrence Seaway provide an approach to the Atlantic Coast.

The capital of the state is Harrisburg. Located in south-central Pennsylvania, the capital city is easily accessible by a network of state and interstate highways.

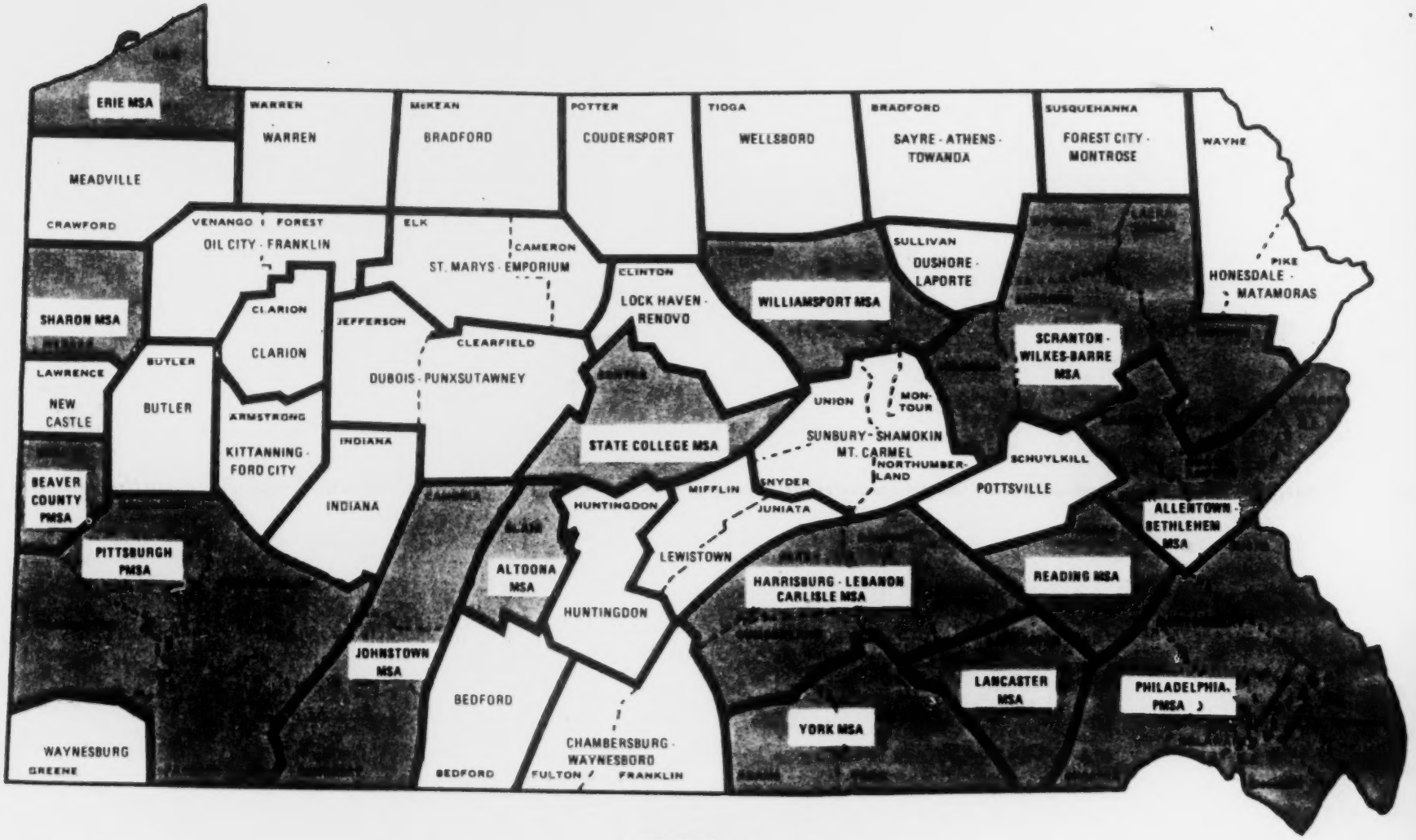
Pennsylvania's economy, like the nation's, is undergoing a structural transition - a major shift from a heavy emphasis on the goods-producing sector (mining, construction and manufacturing) to more emphasis on the service-producing sector. This transition has been taking shape since the 1950s but only in the last decade has it gained momentum, particularly since the 1982-83 recession.

Economies such as Pennsylvania's which have been built on a goods-producing base are more susceptible to the business cycle fluctuations and traditionally suffer greater cutbacks during recession. The more severe the recession, and the 1982-83 recession was as severe as any since the 1930s, the tougher it is to reverse the effects of deep cutbacks. Pennsylvania, nevertheless, has bounced back far better than most people expected. We are becoming a State with a more recession-resistant economy based on a better industrial mix in the goods-producing sector and with more emphasis on the service-producing industries. This transition is led by an increasing demand for information and its timely delivery as well as the rapid growth of advanced technology. It has arrived, as we all now realize, with some pain and sacrifice as the reallocation of resources, especially labor, has hit the western Pennsylvania areas particularly hard. There, unemployment rates remain stubbornly high relative to other areas of the Commonwealth or the nation as a whole. This is true despite the fact that we are in the midst of record-setting economic expansion.

There is much talk of an expanding services sector ultimately contributing to a backward moving economy. An economy where menial, low-paid jobs are the rule of the working class. This thinking is far from the truth as services is rapidly becoming synonymous with information and technology. As for compensation, during recent years, service-producing industry jobs have actually had larger wage increases than the goods-producing sector. In Pennsylvania, the service sector employs a multitude of residents who are classified occupationally in such challenging fields as engineering, computer science, mathematics, accounting, law and health. Throughout the Commonwealth, the service economy is undoubtedly becoming more dynamic, versatile, and knowledge intensive with each passing day.

MAP 1

Labor Market Areas of Pennsylvania



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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF LABOR AND INDUSTRY

MAJOR AREA

MSA - METROPOLITAN STATISTICAL AREA
PMSA - PRIMARY METROPOLITAN STATISTICAL AREA

SECTION II

POPULATION AND LABOR FORCE CHARACTERISTICS AND TRENDS

B. Population Characteristics and Trends

Between 1970 and 1980 Pennsylvania's population increased by fewer than 64,000 people or a little more than 0.5 percent. Most of the state's 67 counties gained population, although ten of them lost residents. This was particularly true in Allegheny and Philadelphia counties, the state's two major urban centers, which together lost more than 416,000 people in ten years. This was a reflection of the tendency of people to move out of center cities to the suburban counties, as well as the general shift of population from the industrial states of the Northeast to the Sun Belt states of the west coast, Southwest, and the South. This drain on urban population slowed considerably between 1980 and 1988, when Allegheny and Philadelphia counties lost about 137,000 residents, a drop of only 4.4 percent, compared with a loss of 11.7 percent between 1970 and 1980. However, the state as a whole recorded a moderate gain of 1.2 percent in its population between 1980 and 1988, more than double the rate of 0.5 percent during the 1970-1980 period.

Although only ten counties lost population during the 1970s, 34 counties suffered population losses between 1980 and 1988, when the state's overall population gain was twice as large. This indicates substantial differences between population-gainers and population-losers. As Table 1 shows, the rate of population loss in Allegheny and (especially) Philadelphia counties slowed considerably in the 1980s, but the problem became more widespread throughout the state. Suburban and mixed urban-and-rural counties tended to gain residents, while the major urban centers and some of the more isolated and sparsely-populated rural counties showed population declines.

The largest percentage loss was 8.8 percent in rural McKean County, followed by 7.2 percent in Cambria and Beaver counties (both urban areas heavily dependent on the ailing steel industry). On the other hand, the largest percentage gains in population in the past eight years were 46.6 percent in rural Pike County and 34.7 percent in the resort area of Monroe County. Both of these sizable population gains resulted in part from an influx of people fleeing the high real estate costs of the suburban New York City-northern New Jersey area and attracted to the relatively low home prices in rural parts of eastern Pennsylvania. Other counties with large percentage gains (greater than ten percent) in residents were Bucks County in the suburban Philadelphia area, prosperous Lancaster County, Perry County in suburban Harrisburg, and rural Fulton and Wayne counties. These last two areas are beginning to display the same pattern of in-migration of people seeking under-valued property that has been going on for several years in Monroe and Pike counties. Delaware County showed a remarkable change in its population patterns between the 1970s and the 1980s. Between 1970 and 1980 Delaware County suffered the loss of more than 48,000 residents or 8.0 percent of its population. However, in the 1980-1988 period this erosion of population was arrested, and the county posted a modest gain of nearly 2000 residents or 0.3 percent.

Substantial population losses in many other Pennsylvania counties can be attributed to a number of factors, among them the decline in employment in the state's manufacturing industries and the transfer of many factory jobs to other states in the past eight years. The counties most severely affected by this population loss are Allegheny, Beaver, Cambria, Fayette, Luzerne, Philadelphia, Washington, and Westmoreland.

Pennsylvania's projected population by age group indicates the state is moving toward an older society. Population declines concentrated in the 5-to-24 and 45-to-64 age groups indicate that people most likely to leave the state are young people just out of school without families and in search of work, young adults with children, and middle-aged workers. However, the population is increasing in the 0-to-4 and 25-to-44 age groups, indicating that the most productive workers (those still young but with some job experience and seniority) and their families are remaining in the state. The population of people age 65 and over is also increasing, an indication that large numbers of people view Pennsylvania's beauty and cultural offerings in conjunction with strong family heritage and, therefore, choose to remain after retirement. This gives the Keystone State an aging population with important implications for health care and geriatric services.

TABLE 1

POPULATION OF PENNSYLVANIA COUNTIES
1988, 1980, AND 1970

County	1988 Estimated	1980 Census	1970 Census	Change 1980 to 1988		Change 1970 to 1980	
				Number	Percent	Number	Percent
Pennsylvania	12,002,060	11,864,720	11,800,766	137340	1.2	63954	0.5
Adams	74,300	68,292	56,937	6008	8.8	11355	19.9
Allegheny	1,354,290	1,450,195	1,605,133	-95905	-6.6	-154938	-9.7
Armstrong	77,920	77,768	75,590	152	0.2	2178	2.9
Beaver	189,820	204,441	208,418	-14621	-7.2	-3977	-1.9
Bedford	47,990	46,784	42,353	1206	2.6	4431	10.5
Berks	329,100	312,509	296,382	16591	5.3	16127	5.4
Blair	132,520	136,821	135,358	-4101	-3.0	1265	0.9
Bradford	64,530	62,919	57,962	1611	2.6	4957	8.6
Bucks	543,560	479,211	416,728	64349	13.4	62483	15.0
Butler	153,390	147,912	127,941	5478	3.7	19971	15.6
Cambria	170,130	183,263	196,785	-13133	-7.2	-3522	-1.9
Cameron	6,400	6,674	7,098	-274	-4.1	-422	-5.9
Carbon	56,140	53,285	50,573	2855	5.4	2712	5.4
Centre	115,660	112,760	99,267	2900	2.6	13493	13.6
Chester	368,540	316,660	277,746	49880	15.8	38914	14.0
Clarion	41,800	43,362	38,414	-1562	-3.6	4948	12.9
Clearfield	81,670	83,578	74,619	-1908	-2.3	8959	12.0
Clinton	38,030	38,971	37,721	-941	-2.4	1250	3.3
Columbia	60,980	61,987	55,114	-1007	-1.6	6853	12.4
Crawford	85,970	88,869	81,342	-2899	-3.3	7527	9.3
Cumberland	185,250	179,625	158,177	15625	8.7	21448	13.6
Dauphin	240,760	232,317	223,713	8443	3.6	8604	3.8
Delaware	556,860	555,029	603,458	1831	0.3	-48427	-8.0
Elk	36,720	38,338	37,770	-1618	-4.2	568	1.5
Erie	277,020	279,780	263,654	-2760	-1.0	16126	6.1
Fayette	152,220	159,417	154,667	-7197	-4.5	4750	3.1
Forest	4,740	5,072	4,826	-332	-6.5	146	3.0
Franklin	120,290	113,629	100,833	6661	5.9	12796	12.7
Fulton	14,380	12,842	10,776	1538	12.0	2066	19.2
Greene	39,740	40,476	36,090	-736	-1.8	4386	12.2
Huntingdon	43,130	42,253	39,108	877	2.1	3145	8.0
Indiana	92,040	92,281	79,451	-241	-0.3	12830	16.1
Jefferson	47,710	48,303	43,695	-593	-1.2	4608	10.5
Juniata	20,270	19,188	16,712	1082	5.6	2476	14.8
Lackawanna	222,310	227,908	234,504	-5598	-2.5	-6596	-2.8
Lancaster	414,120	362,346	320,079	51774	14.3	42267	13.2
Lawrence	100,850	107,150	107,374	-6300	-5.9	-224	-0.2
Lebanon	114,290	108,582	99,665	5708	5.3	8917	8.9
Lehigh	288,660	272,349	255,304	16311	6.0	17045	6.7
Luzerne	331,510	343,079	341,956	-11569	-3.4	1123	0.3
Lycoming	118,280	118,416	113,296	-136	-0.1	5120	4.5
McKean	48,190	50,635	51,915	-4445	-6.8	-1280	-2.5
Mercer	122,380	128,299	127,225	-5919	-4.6	1074	0.8
Mifflin	46,720	46,908	45,268	-188	-0.4	1640	3.6
Monroe	93,500	69,409	45,422	24091	34.7	23987	52.8
Montgomery	687,550	643,371	624,080	44179	6.9	19291	3.1
Montour	16,520	16,675	16,508	-155	-0.9	167	1.0
Northampton	243,650	225,418	214,545	18232	8.1	10873	5.1
Northumberland	98,370	100,381	99,190	-2011	-2.0	1191	1.2
Perry	40,820	35,718	28,615	5102	14.3	7103	24.8
Philadelphia	1,647,020	1,688,210	1,949,996	-41190	-2.4	-261786	-13.4
Pike	26,780	18,271	11,818	8509	46.6	6453	54.6
Potter	18,020	17,726	16,395	294	1.7	1331	8.1
Schuylkill	154,100	160,630	160,089	-6530	-4.1	541	0.3
Snyder	36,350	33,584	29,269	2766	8.2	4315	14.7
Somerset	80,480	81,243	76,037	-763	-0.9	5206	6.8
Sullivan	6,390	6,349	5,961	41	0.6	388	6.5
Susquehanna	40,860	37,876	34,344	2984	7.9	3532	10.3
Tioga	40,290	40,973	39,691	-683	-1.7	1282	3.2
Union	34,910	32,870	28,603	2040	6.2	4267	14.9
Venango	61,020	64,444	62,353	-3424	-5.3	2091	3.4
Warren	45,600	47,449	47,682	-1849	-3.9	-233	-0.5
Washington	209,060	217,074	210,876	-8014	-3.7	6198	2.9
Wayne	40,480	35,237	29,581	5243	14.9	5656	19.1
Westmoreland	378,710	392,184	376,935	-13474	-3.4	15249	4.0
Wyoming	28,360	26,433	19,082	1927	7.3	7351	38.5
York	336,080	312,963	272,603	23117	7.4	40360	14.8

SOURCE: 1988 data are from the U.S. Department of Commerce, 1980 and 1970 are Census data.

TABLE 2

COMPARISON OF POPULATION TOTALS

1980 and Projected 1990

PENNSYLVANIA/MSAs

	Projected Population 1990	Percent of State Total	Change from 1980	
			Net	Percent
PENNSYLVANIA	12,018,816	100.00	154,096	1.28
Allentown-Bethlehem MSA (Pa. Part)	577,224	4.80	24,939	4.32
Altoona MSA	132,367	1.10	-4,254	-3.21
Beaver County PMSA	193,129	1.61	-11,312	-5.86
Erie MSA	286,484	2.38	6,704	2.34
Harrisburg-Lebanon-Carlisle MSA	591,133	4.92	34,891	5.90
Johnstown MSA	253,326	2.11	-11,180	-4.41
Lancaster MSA	411,177	3.42	48,831	11.88
Philadelphia PMSA (Pa. Part)	3,729,737	31.03	47,028	1.26
Pittsburgh PMSA	2,129,117	17.71	-89,753	-4.22
Reading MSA	329,149	2.74	16,640	5.06
Scranton--Wilkes-Barre MSA	728,704	6.06	-92	-0.01
Sharon MSA	125,178	1.04	-3,121	-2.49
State College MSA	118,537	0.99	5,777	4.87
Williamsport MSA	112,947	0.94	-5,469	-4.84
York MSA	414,722	3.45	33,467	8.07

PENNSYLVANIA

POPULATION BY AGE GROUP

1980 and Projected 1990

Age Group	Population		Change from 1980	
	1980	Proj. 1990	Net	Percent
0 - 4	747,512	843,234	95,722	11.35
5 - 9	805,209	796,639	-8,570	-1.08
10 - 14	931,958	747,895	-184,063	-24.61
15 - 19	1,080,688	792,045	-288,643	-36.44
20 - 24	1,059,891	861,056	-198,835	-23.09
25 - 29	945,119	989,756	44,637	4.51
30 - 34	847,908	1,016,917	169,009	16.62
35 - 44	1,274,164	1,756,509	482,345	27.46
45 - 54	1,296,106	1,224,254	-71,852	-5.87
55 - 59	712,125	550,581	-161,544	-29.34
60 - 64	633,027	609,661	-23,366	-3.83
65 - 74	944,133	1,063,960	119,827	11.26
75 and over	586,911	766,309	179,398	23.41
TOTAL	11,864,751	12,018,816	154,065	1.28

SOURCE: Population Issues Research Center, The Pennsylvania State University Institute for Policy Research and Evaluation, 1990 Projection. 1980 data are Census data.

SECTION II

POPULATION AND LABOR FORCE CHARACTERISTICS AND TRENDS

C. Labor Force Characteristics and Trends

The civilian labor force is the sum of the employed and the unemployed, i.e. those people who are working or who are able and available for work and are actively seeking jobs. The inter-relations of the various groups in and out of the labor force are shown in Chart 1. This chart will answer many of the questions commoniy asked about the labor force status of individuals and about the definitions of the terms used by the U.S.Department of Labor and all of the state employment service agencies. The chart is a schematic diagram of the questions asked of respondents to the Current Population Survey (CPS) conducted by the U.S. Bureau of the Census for the U.S. Department of Labor and which is used to determine the unemployment statistics for the United States and the eleven largest industrial states, including Pennsylvania.

Among the important points to note are these: (1) that all persons who work are considered to be employed, regardless of the number of hours they work each week; (2) that the unemployed are those who are on layoff or are waiting to begin a new job or are actively seeking work; (3) that persons who are not actively seeking work are not in the labor force and therefore are neither employed nor unemployed; and (4) that retirees, homemakers, full-time students, and the disabled are not part of the labor force. It is also important to note that receiving unemployment compensation benefits does not have a bearing on labor force status. A person who exhausts his benefits or who did not qualify for them and who is actively seeking work is still considered to be unemployed and is included in the monthly unemployment estimate.

Table 3 gives a civilian labor force profile of Pennsylvania's Metropolitan Statistical Area (the sum of all counties located in MSAs) in comparison with data for the State and Nation. Pennsylvania as a whole has a slightly greater percentage of males than does the Metropolitan Area and the Nation. Due to the composition of the population, Pennsylvania also has a lower proportion of nonwhites and a very small proportion of Hispanics in the labor force, the percentage of those jobless in the state remained below the national average in 1988, but slightly above the average for the Metropolitan Area.

Manufacturing employment in Pennsylvania constitutes a greater percent of total nonagricultural employment than both the Metropolitan Area and the United States. As job volumes in the manufacturing sector have eroded during recent years, nonmanufacturing employment has shown a significant upturn to a point where, during 1988, 79.0 percent of all jobs in Pennsylvania were in nonmanufacturing. Across the nation these industries provide 81.6 percent of all jobs.

Labor force characteristics by sex, age, race, and veteran status are given in Table 4. The Commonwealth's 1988 annual average labor force was 5,780,000. Of this total 5,486,000 were employed, while 294,000 were unemployed yielding a 1988 average unemployment rate of 5.1 percent. Whites

represented 91.7 percent of the labor force and possessed a 4.6 percent unemployment rate. Blacks, although representing just 7.1 percent of the total labor force, had an unemployment rate of 11.3 percent. Similarly, youths 16 to 19 years of age represented only 6.3 percent of the labor force but displayed an unemployment rate of 13.9 percent. Youths 20 to 21 years old represented a smaller share of the labor force, 4.2 percent, with an unemployment rate of 10.5 percent. Varying unemployment rates between youth groups can be partially explained by the younger group having less skill and training and much less commitment to the job market. The state rate of unemployment for all females was 4.9 percent in 1988, two-tenths of a percentage point below the rate for all persons. For black women the rate was 10.3 percent compared to 4.4 percent for white women. The Vietnam-Era veterans' unemployment rate in 1988 was 4.2 percent. They represented 6.0 percent of the labor force and 4.0 percent of the total unemployed.

Statistics on white and nonwhite labor force, employment, and unemployment by county for 1988 are given in Table 5. In 1988 white unemployment averaged 4.6 percent in Pennsylvania, ranging from a low of 2.5 percent in Chester County to a high of 11.2 percent in Greene County. Nonwhite joblessness averaged 10.4 percent statewide, and ranged from a low of 4.9 percent in Clinton County (one of only seven counties with a nonwhite rate below eight percent) to a high of 20.3 percent in Fayette County (one of seven counties whose nonwhite jobless rates were 15 percent or higher). Clinton, Clearfield, and Greene counties were the only areas where the white unemployment rate was higher than that of nonwhites. There were 17 counties for which nonwhite unemployment rates could not be computed, since the extremely small size of their nonwhite labor forces (fewer than 100 persons) made unemployment statistics unreliable. It is also important to note that since these figures are rounded to the nearest 50, nonwhite jobless totals are approximations at best, especially in rural counties with few nonwhite residents. Nevertheless, unemployment among nonwhites almost everywhere in Pennsylvania is a more serious problem than among whites. Table 6 gives similar county labor force data for men and women. The jobless rate for men averaged 5.2 percent in Pennsylvania in 1988, compared with 4.9 percent for women. In fact, male unemployment rates equaled or exceeded female rates in 48 of the state's 67 counties. This is a residual effect of the heavy layoffs in the early and mid-1980s in durable goods manufacturing, transportation and public utilities, and mining, all of which are industries whose work forces are predominantly male. In contrast, the industries that employ large numbers of women (retail trade, finance, insurance, real estate, and services) are all experiencing employment growth. The gap between male and female unemployments levels is narrowing, however. The male rate was only 0.3 percentage points higher than the rate for women in 1988, compared with 0.8 percentage points higher in 1987. Male unemployment rates ranged from a low of 2.5 percent in Chester County to a high of 12.9 percent in Greene County, where unemployment among coal miners has risen in the past several years. Female jobless rates ranged from a low of 3.2 percent in Chester County to a high of 8.6 percent in Indiana County.

Labor force statistics for youth are given in Table 7. Persons between ages 16 and 19 in Pennsylvania had an average unemployment rate of 13.9 percent in 1988, while 20-to-21-year-olds averaged 10.5 percent. The overall rate for all persons (all ages) was 5.1 percent. Young people usually have higher jobless rates than adults, because they have few skills and little or

no work experience, and they are often in school and available for only part-time work. Persons under age 21 are also barred by law from holding some types of dangerous jobs or from working in establishments that serve alcoholic beverages.

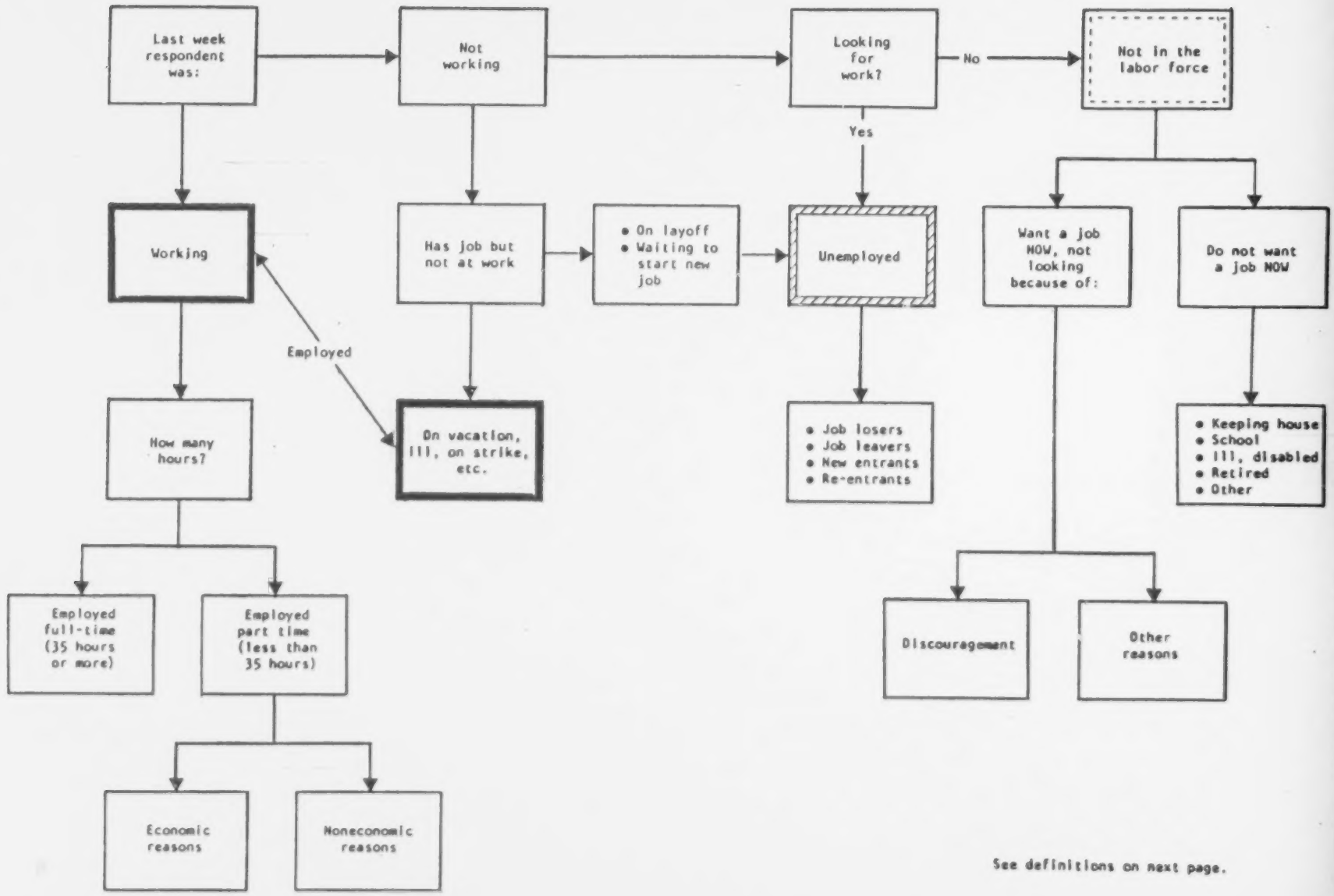
The lowest jobless rate for 16-to-19 year-olds (9.3 percent), occurred, curiously, in Beaver County, an area whose overall unemployment rate in 1988 averaged 9.1 percent, third highest among the state's labor market areas. This low level of youth unemployment has been attributed, in part, to a marked decline in population in among those under age 20 and among those in the 45-to-54 age group. This indicates that many families moved out of Beaver County during the early 1980s when the steel industry collapsed, thus reducing the pool of young people to seek employment. The labor force participation rate of young people in Beaver County is also low, indicating that comparatively few of them are seeking employment, believing the no jobs are available for them. The highest unemployment rate for 16-to-19 year-olds was 24.2 percent in Juniata County. Only four counties reported jobless rates of less than ten percent for this age group. The lowest rate among 20-and 21-year-olds was 4.0 percent in Centre County. This figure is somewhat artificial, since Centre County has a very large population of people under age 25 because of the Pennsylvania State University. College students are counted in the county in which they go to school, and since most college students are either working or are not looking for a job, the county would have an unusually low rate of unemployment in this age group. The highest rate for 20-and 21-year olds was 22.2 percent in Bedford County.

Table 8 gives labor force statistics for Vietnam Era veterans. In 1988, when unemployment in general averaged 5.1 percent, Vietnam-era veterans enjoyed a significantly lower rate of 4.2 percent. Although there are many veterans with employability problems, as a group they generally have less unemployment than the general population. Skills acquired while in military service are often transferable to civilian jobs or lead naturally into further education or training after discharge. Among the 67 counties of Pennsylvania, unemployment rates for Vietnam-era veterans ranged from a low of 2.1 percent in Chester County to a high of 9.0 percent in Fayette County. In general, jobless rates for Vietnam veterans mirrored the general patterns of unemployment throughout the state.

Similar data for all veterans is given in Table 9. Veterans in general had a 4.0 percent unemployment rate in Pennsylvania in 1988, nominally lower than the rate of 4.0 percent for Vietnam-era veterans. By now, enough time has passed since the end of the Vietnam War that its veterans, as a group, experience unemployment problems in virtually the same proportions as all veterans. As was the case with Vietnam veterans, Chester and Fayette counties posted the lowest and highest total veterans unemployment rates, with 1.5 percent and 9.7 percent, respectively.

CHART 1

STATUS OF THE LABOR FORCE



See definitions on next page.

CHART 1

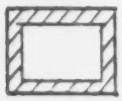
STATUS OF THE LABOR FORCE

DEFINITIONS

Employed -

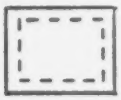
Employed persons comprise (a) all of those who during the survey week (the week including the 12th of the month) did any work at all as paid employees or worked 15 hours or more as unpaid workers in a family-operated enterprise: (b) all those who were not working but who had jobs or businesses from which they were temporarily absent for personal or noneconomic reasons.

Unemployed -



Unemployed persons comprise all those who did not work during the survey, who made specific efforts to find a job within the past four weeks, and who were available for work during the survey week (except for temporary illness). Also included as unemployed are those who were available for work, and (a) were waiting to be called back to a job from which they had been laid off, or (b) were waiting to report to a new wage or salary job within 30 days.

Not in the Labor Force -



Not in the labor force includes all civilians 16 years and over who are neither employed nor unemployed.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics

TABLE 3

METROPOLITAN AREA / PENNSYLVANIA / UNITED STATES

CIVILIAN LABOR FORCE PROFILE

(PERCENT DISTRIBUTION OF 1988 ANNUAL AVERAGES)

WHO THEY ARE: CHARACTERISTICS OF THE CIVILIAN LABOR FORCE

	Metropolitan Area *	Pennsylvania	United States
Total	100.0%	100.0%	100.0%
Male	55.0	55.5	55.0
Female	45.0	44.5	45.0
16-19 yrs., both sexes	6.1	6.3	6.6
20-21 yrs., both sexes	4.0	4.2	NA
20-24 yrs., both sexes	NA	10.9	11.9
25-44 yrs., both sexes	NA	51.9	53.4
45 yrs. & over, both sexes	NA	30.9	28.1
White	90.5	91.7	86.1
Male	49.8	51.5	47.9
Female	40.7	40.3	38.2
Nonwhite	9.5	8.3	13.9
Male	5.2	4.1	7.1
Female	4.3	4.2	6.8
Hispanic	1.4	1.3	7.4
Male	0.9	0.8	4.4
Female	0.5	0.5	2.9
Vietnam-Era Veterans	5.9	6.0	6.0
At Work	95.2	94.9	94.5
Unemployed	4.8	5.1	5.5

WHERE THEY WORK: INDUSTRY EMPLOYMENT

	Metropolitan Area *	Pennsylvania	United States
Total Nonagr. Wage & Salary	100.0%	100.0%	100.0%
Manufacturing	20.1	21.0	18.4
Durable goods	11.4	12.0	10.9
Primary metal industries	NA	1.8	0.7
Machinery, excl. electrical	NA	2.1	2.0
Other durable goods	NA	8.0	8.1
Nondurable goods	8.7	9.0	7.6
Apparel & other textile prods.	NA	1.7	1.0
Food & kindred products	NA	1.8	1.6
Other nondurable goods	NA	5.5	5.0
Nonmanufacturing	79.9	79.0	81.6
Mining	0.3	0.6	0.7
Contract construction	4.6	4.6	5.0
Transportation & public utilities	5.0	5.0	5.3
Wholesale trade	5.7	5.4	5.8
Retail trade	17.5	17.5	18.1
Finance, insurance, & real estate	6.2	5.8	6.3
Services & miscellaneous	27.2	26.4	24.0
Government	13.4	13.8	16.4
Federal government	2.9	2.8	2.8
State & local government	10.5	11.0	13.6

* METROPOLITAN AREA is the sum of all Pennsylvania Counties located in Metropolitan Statistical Areas (MSAs).

NA - Not Available

SOURCES: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry. Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, March, 1989.

TABLE 4

PENNSYLVANIA LABOR FORCE CHARACTERISTICS
EMPLOYMENT AND UNEMPLOYMENT BY SEX, AGE, MINORITY, AND VETERAN STATUS

Annual Average 1988

Sex, Age, Minority and Veteran Status	Labor Force	Employed	Unemployed	Percent Distribution Labor Force	Emp.	Une.	Unemploy. Rate 4/
Both Sexes							
Total	5,780,000	5,486,000	294,000	100.00	100.00	100.00	5.1%
White	5,301,000	5,057,000	244,000	91.71	92.18	82.99	4.6
Black	408,000	362,000	46,000	7.06	6.60	15.65	11.3
Other Races	71,000	67,000	4,000	1.23	1.22	1.36	5.6
Hispanic 1/	73,000	67,000	5,000	1.26	1.22	1.70	7.4
Minority Group 2/	552,000	496,000	55,000	9.55	9.04	18.71	10.0
Total Veteran	911,000	874,000	37,000	15.76	15.93	12.59	4.0
Vietnam-Era Veteran 3/	346,000	331,000	14,000	5.99	6.03	4.76	4.2
Age							
16 to 19 years	366,000	315,000	51,000	6.33	5.74	17.35	13.9
20 to 21 years	240,000	215,000	25,000	4.15	3.92	8.50	10.5
Female							
Total	2,570,000	2,444,000	126,000	100.00	100.00	100.00	4.9
Percent of both sexes	44.46	44.55	42.86	---	---	---	---
White	2,327,000	2,224,000	103,000	90.54	91.00	81.75	4.4
Black	213,000	191,000	22,000	8.29	7.82	17.46	10.3
Other Races	30,000	29,000	1,000	1.17	1.19	0.79	4.0
Hispanic 1/	29,000	26,000	2,000	1.13	1.06	1.59	8.7
Minority Group 2/	272,000	246,000	25,000	10.58	10.07	19.84	9.2

1/ Hispanic persons are of Mexican, Puerto Rican, Cuban, Central or South American, or some other Spanish origin.
2/ Sum of black, other races, & Hispanic. Some duplication is possible since Hispanics may include nonwhite races
3/ Vietnam-Era veterans are those who served between August 5, 1964 and May 7, 1975.
4/ Unemployment rates calculated from unrounded data.

All data are on 1988 benchmarks.
Items may not add to totals due to rounding.
SOURCE: Current Population Survey, U.S. Department of Labor, Bureau of Labor Statistics.

TABLE 5
PENNSYLVANIA

CIVILIAN LABOR FORCE DATA FOR WHITE AND NON-WHITE PERSONS
BY COUNTY OF RESIDENCE: ANNUAL AVERAGE 1988

COUNTY	WHITE				NON-WHITE			
	Labor Force	Employment	Unemployment	Rate	Labor Force	Employment	Unemployment	Rate
Adams	37,800	36,300	1,450	3.9	450	350	50	12.3
Allegheny	580,700	559,300	21,450	3.7	61,550	51,750	9,750	15.9
Armstrong	28,050	25,750	2,300	8.2	350	300	50	9.1
Beaver	55,750	51,000	4,750	8.5	4,600	3,850	750	16.5
Bedford	20,750	19,050	1,750	8.4	100	100	1/	9.2
Berks	168,200	161,150	7,050	4.2	5,350	4,750	600	11.1
Blair	59,150	55,150	4,000	6.8	450	400	50	13.9
Bradford	30,900	29,450	1,500	4.8	100	100	1/	7.1
Bucks	285,950	276,650	9,300	3.2	7,400	6,750	650	8.8
Butler	71,250	67,100	4,150	5.8	550	500	50	7.9
Cambria	61,400	57,050	4,400	7.1	1,350	1,200	150	11.4
Cameron	2,700	2,500	150	6.1	1/	1/	1/	2/
Carbon	24,800	23,250	1,600	6.4	50	50	1/	2/
Centre	61,500	58,450	3,100	5.0	950	850	50	6.6
Chester	178,050	173,700	4,350	2.5	12,300	11,350	950	7.6
Clarion	17,500	16,100	1,450	8.2	150	150	1/	8.4
Clearfield	34,700	31,600	3,150	9.0	200	200	1/	6.6
Clinton	15,450	14,300	1,150	7.3	150	150	1/	4.9
Columbia	31,100	29,350	1,750	5.7	150	100	1/	11.5
Crawford	38,750	36,150	2,600	6.7	550	450	50	12.8
Cumberland	104,400	101,150	3,250	3.1	1,500	1,350	150	10.9
Dauphin	117,150	112,950	4,150	3.6	14,500	12,850	1,600	11.1
Delaware	273,800	266,150	7,650	2.8	23,100	20,750	2,350	10.2
Elk	17,300	16,350	950	5.5	1/	1/	1/	2/
Erie	125,300	118,050	7,250	5.8	5,050	4,450	600	12.0
Fayette	56,400	51,250	5,100	9.1	1,900	1,500	400	20.3
Forest	1,900	1,700	200	9.6	1/	1/	1/	2/
Franklin	54,300	52,100	2,200	4.0	1,200	1,100	100	8.7
Fulton	5,850	5,450	400	7.0	50	50	1/	2/
Greene	12,850	11,400	1,450	11.2	150	150	1/	9.4
Huntingdon	18,100	16,600	1,450	8.1	250	200	50	18.9
Indiana	35,250	31,950	3,250	9.3	400	350	50	11.6
Jefferson	20,100	18,600	1,550	7.6	50	50	1/	2/
Juniata	9,900	9,100	800	8.2	1/	1/	1/	2/
Lackawanna	107,650	101,850	5,800	5.4	700	650	50	9.9
Lancaster	213,150	206,000	7,150	3.4	5,550	5,000	550	10.1
Lawrence	46,000	43,300	2,700	5.9	1,150	1,050	150	12.6
Lebanon	61,750	59,250	2,550	4.1	550	500	50	11.4
Lehigh	143,650	137,850	5,850	4.1	3,200	2,750	450	13.9
Luzerne	159,000	148,100	10,900	6.9	950	800	150	15.0
Lycoming	58,400	55,350	3,050	5.2	850	750	100	13.8
McKean	20,600	19,250	1,350	6.5	100	100	1/	10.1
Mercer	48,150	45,750	2,350	4.9	2,100	1,900	200	8.7
Mifflin	21,350	19,900	1,500	6.9	100	50	1/	6.9
Monroe	44,750	42,850	1,900	4.3	550	500	50	9.3
Montgomery	368,000	357,750	10,250	2.8	17,750	16,150	1,600	9.0
Montour	8,200	7,850	350	4.5	50	50	1/	2/
Northampton	112,050	107,350	4,700	4.2	2,650	2,300	300	12.3
Northumberland	48,700	45,200	3,550	7.2	100	100	1/	12.3
Perry	20,100	19,100	950	4.9	50	50	1/	2/
Philadelphia	446,000	426,000	20,000	4.5	286,000	260,000	26,000	9.1 3/
Pike	11,800	11,300	500	4.2	50	50	1/	2/
Potter	7,750	7,300	500	6.2	50	50	1/	2/
Schuylkill	72,850	68,150	4,700	6.5	300	250	50	8.8
Snyder	18,650	17,700	950	5.1	50	50	1/	2/
Somerset	31,850	29,400	2,450	7.7	100	100	1/	8.0
Sullivan	2,950	2,850	150	4.6	1/	1/	1/	2/
Susquehanna	17,800	16,750	1,050	6.0	50	50	1/	2/
Tioga	18,000	16,950	1,050	5.8	100	100	1/	10.9
Union	16,750	16,000	750	4.3	150	100	1/	11.4
Venango	25,800	24,150	1,700	6.6	200	150	1/	10.7
Warren	21,950	20,850	1,100	4.9	50	50	1/	2/
Washington	89,000	83,300	5,700	6.4	2,850	2,300	500	18.4
Wayne	19,850	18,800	1,050	5.4	50	50	1/	2/
Westmoreland	169,300	157,300	12,000	7.1	3,100	2,550	550	18.1
Wyoming	13,100	12,250	800	6.2	50	50	1/	2/
York	174,900	167,600	7,300	4.2	4,550	4,100	450	10.1
PENNSYLVANIA	5,301,000	5,057,000	244,000	4.6	479,000	429,000	50,000	10.4

See footnotes on next page.

PENNSYLVANIA

CIVILIAN LABOR FORCE DATA FOR WHITE AND NONWHITE PERSONS
BY COUNTY OF RESIDENCE: ANNUAL AVERAGE 1988

FOOTNOTES

1/ Less than 25.

2/ Accurate unemployment rate is not available.

3/ Philadelphia County data are obtained directly from the Current Population Survey. The use of this data means that the sum of all the counties may not add to the state totals for White and Nonwhite.

Data are rounded to the nearest 50.

Data are based on the 1988 benchmark.

The rate of unemployment is computed using unrounded data.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 9
PENNSYLVANIA

CIVILIAN LABOR FORCE DATA BY SEX
BY COUNTY OF RESIDENCE: ANNUAL AVERAGE 1968

COUNTY	MALE				FEMALE			
	Labor Force	Employment	Unemployment	Rate	Labor Force	Employment	Unemployment	Rate
Adams	20,800	20,050	750	3.7	17,400	16,650	750	4.3
Allegheny	356,800	338,200	18,600	5.2	285,450	272,850	12,650	4.4
Armstrong	17,500	15,850	1,600	9.2	10,950	10,200	700	6.6
Beaver	36,200	32,600	3,600	9.9	24,150	22,200	1,900	7.9
Bedford	12,600	11,500	1,100	8.7	8,250	7,600	650	7.8
Berks	94,900	90,900	3,950	4.2	78,700	75,000	3,650	4.7
Blair	33,450	31,150	2,350	6.9	26,100	24,350	1,750	6.7
Bradford	17,900	17,100	750	4.3	13,150	12,450	700	5.4
Bucks	166,350	161,100	5,250	3.2	127,000	122,300	4,700	3.7
Butler	42,350	39,700	2,650	6.2	29,450	27,900	1,550	5.2
Cambria	37,300	34,550	2,750	7.4	25,400	23,650	1,800	7.0
Cameron	1,500	1,400	100	6.9	1,200	1,150	50	5.2
Carbon	14,050	13,050	1,000	7.0	10,850	10,250	600	5.7
Centre	33,850	32,200	1,650	4.9	28,600	27,100	1,500	5.2
Chester	106,500	103,850	2,650	2.5	83,850	81,200	2,650	3.2
Clarion	10,700	9,800	900	8.6	6,950	6,400	500	7.5
Clearfield	20,550	18,600	1,950	9.4	14,350	13,150	1,200	8.4
Clinton	8,750	8,050	700	8.1	6,800	6,350	450	6.3
Columbia	16,950	16,100	900	5.3	14,250	13,350	900	6.2
Crawford	22,550	20,950	1,600	7.1	16,700	15,650	1,050	6.3
Cumberland	57,000	55,300	1,650	2.9	48,900	47,150	1,750	3.6
Dauphin	69,000	65,850	3,150	4.5	62,600	59,950	2,650	4.2
Delaware	162,400	156,800	5,600	3.4	134,500	130,050	4,400	3.3
Elk	10,000	9,450	550	5.4	7,350	6,950	400	5.7
Erie	72,700	68,150	4,550	6.2	57,650	54,350	3,300	5.7
Fayette	36,450	32,700	3,750	10.3	21,850	20,100	1,750	8.1
Forest	1,100	1,000	100	11.1	800	750	50	7.6
Franklin	30,800	29,700	1,150	3.7	24,700	23,500	1,150	4.7
Fulton	3,500	3,250	250	7.3	2,400	2,250	150	6.8
Greene	8,200	7,150	1,050	12.9	4,850	4,450	400	8.2
Huntingdon	10,400	9,450	950	9.1	7,900	7,350	550	7.2
Indiana	21,300	19,200	2,100	9.8	14,350	13,150	1,250	8.6
Jefferson	12,000	11,000	1,000	8.1	8,200	7,600	550	6.9
Juniata	5,850	5,300	550	9.8	4,050	3,850	250	6.0
Lackawanna	59,050	55,850	3,250	5.5	49,300	46,700	2,600	5.3
Lancaster	121,200	117,400	3,800	3.1	97,550	93,600	3,950	4.1
Lawrence	28,150	26,350	1,800	6.4	19,050	17,950	1,050	5.6
Lebanon	33,950	32,600	1,300	3.9	28,400	27,100	1,250	4.5
Lehigh	80,300	76,650	3,650	4.6	66,550	63,950	2,600	3.9
Luzerne	87,000	80,600	6,350	7.3	72,950	68,300	4,700	6.4
Lycoming	32,600	30,750	1,900	5.7	26,600	25,350	1,300	4.8
McKean	11,650	10,850	800	6.9	9,050	8,500	550	6.0
Mercer	29,650	28,200	1,500	5.0	20,600	19,500	1,050	5.2
Mifflin	12,250	11,350	850	7.1	9,200	8,600	600	6.7
Monroe	24,950	23,950	1,000	4.1	20,350	19,400	950	4.6
Montgomery	209,750	203,650	6,100	2.9	175,950	170,250	5,750	3.3
Montour	4,500	4,300	200	4.8	3,750	3,600	150	4.3
Northampton	64,350	61,600	2,750	4.2	50,350	48,050	2,300	4.6
Northumberland	27,400	25,350	2,050	7.4	21,450	19,950	1,500	7.0
Perry	11,700	11,150	550	4.8	8,400	8,000	400	4.9
Philadelphia	372,000	346,000	26,000	7.0	360,000	314,000	20,000	5.6 1/
Pike	6,750	6,500	250	3.7	5,100	4,850	250	4.9
Potter	4,600	4,300	300	6.4	3,200	3,000	200	5.9
Schuylkill	40,500	37,800	2,750	6.7	32,650	30,600	2,000	6.2
Snyder	10,550	9,950	550	5.4	8,150	7,750	400	4.7
Somerset	19,150	17,600	1,550	8.1	12,800	11,900	900	7.2
Sullivan	1,750	1,650	100	5.0	1,250	1,200	50	4.0
Susquehanna	10,400	9,800	650	6.1	7,450	7,000	450	6.0
Tioga	10,300	9,700	600	5.7	7,800	7,350	450	6.1
Union	9,300	8,850	400	4.4	7,600	7,250	350	4.4
Venango	15,200	14,100	1,100	7.2	10,800	10,200	600	5.8
Warren	12,400	11,750	650	5.3	9,600	9,150	400	4.4
Washington	55,200	51,150	4,050	7.3	36,650	34,500	2,150	5.9
Wayne	11,400	10,800	650	5.5	8,500	8,050	450	5.3
Westmoreland	102,300	94,700	8,200	8.0	69,500	65,150	4,350	6.3
Wyoming	7,750	7,250	550	6.8	5,350	5,100	300	5.5
York	99,800	95,850	3,950	3.9	79,650	75,850	3,800	4.8
PENNSYLVANIA	3,210,000	3,042,000	168,000	5.2	2,570,000	2,444,000	126,000	4.9

1/ Philadelphia County data are obtained directly from the Current Population Survey. The use of this data means that the sum of all the counties may not add to the state totals.

Data are rounded to the nearest 50. Rate computed using unrounded data.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 7
PENNSYLVANIA

CIVILIAN LABOR FORCE DATA FOR 16-19 AND 20-21 YEAR OLDS
BY COUNTY OF RESIDENCE: ANNUAL AVERAGE 1988

COUNTY	16-19 YEAR OLDS				20-21 YEAR OLDS			
	Labor Force	Employment	Unemployment	Rate	Labor Force	Employment	Unemployment	Rate
Adams	2,275	1,825	475	20.4	1,425	1,275	125	9.6
Allegheny	39,325	35,375	3,925	10.0	25,975	23,500	2,475	9.5
Armstrong	2,425	2,175	250	10.7	1,475	1,300	175	12.4
Beaver	6,100	5,525	575	9.3	4,000	3,575	425	10.5
Bedford	1,650	1,300	325	20.3	975	775	225	22.2
Berks	8,975	7,725	1,250	14.0	5,875	5,300	575	9.7
Blair	4,325	3,650	675	15.5	2,650	2,225	425	16.2
Bradford	2,250	1,850	400	17.5	1,400	1,250	150	10.8
Bucks	16,675	14,800	1,875	11.3	10,625	9,825	800	7.6
Butler	4,850	4,100	775	15.7	3,175	2,775	400	12.9
Cambria	5,600	4,850	750	13.6	3,600	3,125	475	13.5
Cameron	200	175	25	15.9	125	100	25	15.0
Carbon	1,550	1,275	250	16.7	1,000	875	150	13.9
Centre	6,925	5,775	1,150	16.6	9,300	8,925	375	4.0
Chester	10,650	9,450	1,200	11.2	6,825	6,400	425	6.4
Clarion	2,375	2,100	275	11.8	1,850	1,675	150	8.7
Clearfield	2,850	2,300	550	19.4	1,775	1,400	375	20.6
Clinton	1,175	1,025	150	13.5	725	625	100	14.4
Columbia	1,825	1,475	350	19.2	1,150	950	200	16.4
Crawford	3,000	2,600	425	14.1	1,875	1,600	250	13.8
Cumberland	5,400	4,600	825	15.0	3,325	3,050	275	8.5
Dauphin	7,050	6,075	975	13.7	4,375	3,950	425	9.6
Delaware	15,725	13,500	2,200	14.0	10,475	9,600	875	8.3
Elk	1,325	1,125	200	15.5	900	800	100	11.5
Erie	9,300	7,800	1,500	16.1	5,625	4,825	825	14.5
Fayette	5,125	4,550	575	11.2	3,275	2,925	375	11.3
Forest	150	125	25	16.2	100	75	25	13.1
Franklin	3,825	3,175	650	17.0	2,325	2,100	225	9.4
Fulton	450	375	75	14.4	300	275	25	10.0
Greene	1,350	1,225	125	9.9	825	700	125	14.7
Huntingdon	1,425	1,175	250	17.6	825	700	125	16.5
Indiana	4,975	4,275	700	14.1	4,275	3,875	375	9.1
Jefferson	1,500	1,275	225	15.5	925	750	175	19.8
Juniata	625	475	150	24.2	400	300	75	21.9
Lackawanna	6,375	5,350	1,025	16.1	4,125	3,600	550	13.1
Lancaster	11,475	9,775	1,700	14.8	7,075	6,550	550	7.6
Lawrence	3,175	2,750	425	13.3	1,950	1,725	225	11.3
Lebanon	3,325	2,825	525	15.6	2,075	1,875	200	9.9
Lehigh	7,750	6,825	900	11.7	4,975	4,500	475	9.3
Luzerne	9,800	8,050	1,750	17.8	6,200	5,225	975	15.7
Lycoming	3,775	3,025	725	19.4	2,325	2,000	350	14.5
McKean	1,750	1,450	300	16.5	1,100	950	150	13.3
Mercer	3,875	3,450	425	10.8	2,500	2,275	225	9.3
Mifflin	1,600	1,300	275	17.6	1,025	850	175	18.1
Monroe	2,075	1,775	300	14.7	1,275	1,125	150	10.9
Montgomery	18,825	16,425	2,400	12.7	12,450	11,425	1,025	8.2
Montour	475	425	50	10.4	300	275	50	13.0
Northampton	6,600	5,700	875	13.4	4,300	3,925	375	8.5
Northumberland	3,000	2,475	525	17.4	1,875	1,550	325	17.3
Perry	1,275	1,100	150	12.6	800	725	75	10.0
Philadelphia	49,100	41,525	7,575	15.4	31,975	28,600	3,375	10.5
Pike	500	425	100	17.8	325	300	25	10.9
Potter	650	550	100	15.7	400	350	50	13.7
Schuylkill	4,575	3,875	725	15.7	2,975	2,525	450	15.0
Snyder	1,075	825	250	22.8	650	525	125	17.7
Somerset	2,600	2,275	325	12.5	1,575	1,325	250	15.2
Sullivan	175	150	25	9.9	125	125	1/	9.4
Susquehanna	1,350	1,150	200	15.0	825	725	100	11.3
Tioga	1,400	1,175	225	15.7	875	775	100	11.8
Union	975	825	150	16.3	600	500	100	15.5
Venango	2,025	1,800	225	11.4	1,300	1,150	150	12.1
Warren	1,525	1,300	225	14.5	975	875	100	10.6
Washington	6,625	5,975	650	9.7	4,000	3,550	450	11.5
Wayne	1,150	900	250	22.1	725	625	100	13.1
Westmoreland	12,175	10,875	1,300	10.6	7,950	7,050	900	11.2
Wyoming	1,025	925	100	10.6	525	475	75	12.1
York	10,425	8,700	1,750	16.7	6,325	5,700	650	10.1
PENNSYLVANIA	366,000	315,000	51,000	13.9	240,000	215,000	25,000	10.5

1/ Data less than 25.
Data rounded to nearest 25. Rate computed using unrounded data.
SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 8

PENNSYLVANIA

CIVILIAN LABOR FORCE DATA BY COUNTY OF RESIDENCE

FOR VIETNAM ERA VETERANS

1988 ANNUAL AVERAGE

COUNTY	CIVILIAN LABOR FORCE	EMP	UNE	RATE (%)	COUNTY	CIVILIAN LABOR FORCE	EMP	UNE	RATE (%)
Adams	1,900	1,825	50	3.1	Lackawanna	6,700	6,425	275	4.1
Allegheny	37,250	35,525	1,725	4.6	Lancaster	10,925	10,625	300	2.7
Armstrong	2,400	2,250	150	6.3	Lawrence	2,550	2,425	125	4.6
Beaver	5,075	4,650	425	8.6	Lebanon	3,375	3,250	100	3.2
Bedford	1,100	1,050	75	6.5	Lehigh	9,500	9,175	300	3.3
Berks	9,825	9,500	325	3.4	Luzerne	10,525	9,975	550	5.3
Blair	3,750	3,550	200	5.3	Lycoming	3,475	3,325	150	4.1
Bradford	1,800	1,750	75	3.7	McKean	1,225	1,150	50	5.0
Bucks	19,075	18,600	500	2.6	Mercer	3,325	3,175	125	3.9
Butler	4,925	4,725	225	4.5	Mifflin	1,150	1,100	50	5.3
Cambria	4,800	4,550	275	5.6	Monroe	3,200	3,100	100	3.3
Cameron	200	200	1/	4.7	Montgomery	21,250	20,750	500	2.4
Carbon	1,825	1,725	100	4.9	Montour	425	425	25	3.6
Centre	3,300	3,175	125	3.8	Northampton	7,475	7,200	250	3.4
Chester	11,500	11,250	250	2.1	Northumberland	2,800	2,650	150	5.6
Clarion	1,075	1,000	75	6.3	Perry	1,175	1,125	50	3.8
Clearfield	2,200	2,050	150	6.9	Philadelphia	40,600	38,800	1,800	4.5
Clinton	1,000	950	50	5.6	Pike	850	825	25	3.2
Columbia	1,675	1,600	75	4.4	Potter	425	425	25	4.8
Crawford	2,575	2,425	125	5.2	Schuylkill	4,750	4,525	225	5.0
Cumberland	6,025	5,875	150	2.5	Snyder	800	775	25	3.9
Dauphin	7,450	7,200	250	3.4	Somerset	2,225	2,100	125	5.9
Delaware	16,925	16,475	450	2.6	Sullivan	175	175	1/	3.6
Elk	1,050	1,000	50	4.2	Susquehanna	1,225	1,175	50	4.6
Erie	8,775	8,350	400	4.6	Tioga	1,075	1,025	50	4.6
Fayette	3,675	3,350	325	9.0	Union	1,000	975	25	3.4
Forest	125	100	1/	7.4	Venango	1,800	1,700	100	5.1
Franklin	3,250	3,150	100	3.2	Warren	1,425	1,375	50	3.8
Fulton	350	325	25	5.5	Washington	5,600	5,225	350	6.4
Greene	1,175	1,075	100	8.5	Wayne	1,200	1,150	50	4.1
Huntingdon	1,200	1,125	75	6.4	Westmoreland	10,425	9,700	725	6.9
Indiana	2,675	2,475	200	7.1	Wyoming	875	850	50	4.8
Jefferson	1,325	1,250	75	5.8	York	10,325	9,975	350	3.3
Juniata	450	425	25	6.3					
					PENNSYLVANIA	346,000	331,000	14,000	4.2

1/ Data are less than 13.

ALL DATA ARE ON 1988 BENCHMARKS.

Rate computed using unrounded data and may not add to totals due to rounding.

SOURCE: Bureau of Research and Statistics, Pennsylvania Dept. of Labor and Industry

TABLE 9

PENNSYLVANIA

CIVILIAN LABOR FORCE DATA BY COUNTY OF RESIDENCE

FOR TOTAL VETERANS

1988 ANNUAL AVERAGE

COUNTY	CIVILIAN LABOR FORCE	EMP	UNE	RATE (%)	COUNTY	CIVILIAN LABOR FORCE	EMP	UNE	RATE (%)
Adams	4,575	4,400	150	3.4	Lackawanna	17,675	16,875	800	4.5
Allegheny	118,175	112,275	5,900	5.0	Lancaster	24,825	24,100	725	2.9
Armstrong	5,825	5,425	400	6.9	Lawrence	6,950	6,600	350	5.1
Beaver	15,775	14,300	1,450	9.3	Lebanon	8,250	7,950	300	3.5
Bedford	2,825	2,625	200	7.1	Lehigh	21,925	21,125	800	3.6
Berks	24,575	23,675	900	3.7	Luzerne	26,800	25,250	1,550	5.8
Blair	9,650	9,100	575	5.8	Lycoming	8,300	7,925	375	4.5
Bradford	3,925	3,750	150	4.1	McKean	3,225	3,050	175	5.5
Bucks	50,875	49,950	900	1.8	Mercer	7,875	7,550	350	4.3
Butler	11,125	10,575	550	4.9	Mifflin	3,075	2,900	175	5.8
Cambria	12,025	11,300	725	6.1	Monroe	7,650	7,375	275	3.6
Cameron	500	475	25	5.1	Montgomery	64,650	63,600	1,050	1.6
Carbon	4,550	4,300	250	5.4	Montour	1,075	1,025	50	3.9
Centre	6,975	6,675	300	4.2	Northampton	17,575	16,925	650	3.7
Chester	31,300	30,850	450	1.5	Northumberland	7,175	6,725	450	6.2
Clarion	2,525	2,350	175	6.9	Perry	2,575	2,450	100	4.1
Clearfield	5,375	4,950	400	7.6	Philadelphia	101,000	98,650	2,350	2.3
Clinton	2,725	2,575	175	6.2	Pike	2,450	2,375	75	3.5
Columbia	4,125	3,925	200	4.8	Potter	1,100	1,050	50	5.2
Crawford	5,700	5,375	325	5.7	Schuylkill	12,500	11,825	675	5.4
Cumberland	15,025	14,625	400	2.7	Snyder	1,825	1,750	75	4.3
Dauphin	18,150	17,475	675	3.7	Somerset	5,175	4,825	325	6.5
Delaware	51,875	50,950	925	1.8	Sullivan	425	400	25	3.9
Elk	2,725	2,600	125	4.6	Susquehanna	2,725	2,575	125	5.0
Erie	18,950	18,000	950	5.1	Tioga	2,525	2,400	125	5.0
Fayette	11,775	10,625	1,150	9.7	Union	2,150	2,075	75	3.7
Forest	350	300	25	8.1	Venango	4,000	3,800	225	5.6
Franklin	8,150	7,875	275	3.5	Warren	3,275	3,150	125	4.2
Fulton	850	800	50	6.0	Washington	16,975	15,800	1,175	6.9
Greene	2,500	2,275	225	9.3	Wayne	2,850	2,725	125	4.5
Huntingdon	2,900	2,675	200	7.0	Westmoreland	31,325	29,000	2,325	7.4
Indiana	5,400	4,975	425	7.8	Wyoming	1,850	1,750	100	5.2
Jefferson	3,150	2,950	200	6.4	York	23,300	22,475	850	3.6
Juniata	1,100	1,025	75	6.9					
					PENNSYLVANIA	911,000	874,000	37,000	4.0

ALL DATA ARE ON 1988 BENCHMARKS.

Rate computed using unrounded data and may not add to totals due to rounding.

SOURCE: Bureau of Research and Statistics, Pennsylvania Dept. of Labor and Industry

SECTION III

INDUSTRY TRENDS AND DEVELOPMENTS

A. Employment Trends by Industry

The long-range shifts in employment in Pennsylvania are illustrated in Table 11, which shows employment by industry in five-year intervals from 1940 to 1988. Manufacturing employment rose during the 1940s and early 1950s, reaching a peak of 1,653,500 in 1953, an increase of 592,100 jobs in just 14 years from the low point in 1939. Much of this increase was, of course, a direct result of World War II, first as a requirement of the war effort and then, in the post-war years, in response to the demand for manufactured goods in European and Asian countries whose own industries had been destroyed. From the mid-1950s onward, however, the state's manufacturing work force declined as a result of competition with rebuilt factories in other countries, greater automation and mechanization (which resulted in increased output with less manpower), and a rising demand for consumer services. By far the largest decline in manufacturing employment has occurred between 1980 and 1987, when recessionary pressures resulted in the loss of more than 284,000 factory jobs in Pennsylvania. Fewer Pennsylvanians worked in factories in 1987 than in any year since the 1930s. However, manufacturing did experience a turnaround in 1988, as employment statewide rose by 11,800.

By contrast, nonmanufacturing employment has grown steadily in Pennsylvania since 1939 (the earliest year for which comprehensive data are available). It is interesting to note that those nonmanufacturing industries that are closely tied to steel production and other heavy manufacturing have exhibited a trend pattern similar to that of manufacturing. For the past century, Pennsylvania has been famous for coal mining and steel manufacture; both industries have declined dramatically in the past decade. Employment in mining dropped by 87 percent from a peak of 222,200 workers in 1940, when both homes and factories were generally heated by coal, to just 29,100 in 1988, the lowest figure on record. The increased use of mining machinery and the depletion of surface coal deposits through strip mining, together with the development of alternative energy sources and the decline of the steel industry and its appetite for coke and electricity were principally responsible for the loss of employment. Transportation and public utilities (which reached its employment peak in 1951) reached a low point in 1986. Construction grew rapidly in the decade following World War II, then more slowly over the next 30 years. Employment has rebounded in recent years to reach a record level of 230,800 jobs in 1988. Federal government employment reached its high point in 1952, but the peak for state and local government did not occur until 1978 when CETA public service employment programs were at their most expansive. However, 1988 was a year of record high employment in wholesale trade, retail trade, services, and the finance, insurance, and real estate industry group, as well as in construction. This shift from goods-producing to service-producing industries is a state-wide trend that has also characterized most of the major labor market areas in Pennsylvania as well.

Table 12 gives a percentage distribution of the data in Table 11. In 1945, as Pennsylvania began the shift from a wartime to a peacetime economy, 44.5 percent of the state's workers were employed in manufacturing. By 1988 that figure had been more than cut in half (21.0 percent). At the same time, the proportion of workers in services more than doubled from 10.2 percent in 1940 to 26.4 percent in 1988. Industries such as contract construction, wholesale and retail trade, finance, insurance, and real estate, and state and local government increased their shares of Pennsylvania's work force at a slower pace. There was a nominal drop in the federal government share, while the percentage of workers in transportation and public utilities was cut almost in half, from 9.6 percent in 1945 to 5.1 percent in 1988. However, mining, which employed 7.7 percent of Pennsylvania's nonagricultural labor force in 1940, employed only 0.6 percent in 1988. Pennsylvania has long been identified as a manufacturing and mining state, and these activities employed just under half (49.8 percent) of all the state's nonfarm workers in 1945; by 1988 this share had fallen to just 21.6 percent.

Tables 13 and 14 give similar data for the United States. Here, too, the shift of employment away from manufacturing and toward nonmanufacturing is apparent, although it is not as striking as it is in a highly industrialized state such as Pennsylvania. Manufacturing employment in the United States did not peak in the early 1950s as it did in Pennsylvania, but continued to grow through 1979. However, the rate of growth in the 1970s and 1980s was quite slow, and there were periods of decline due to recessions in the mid-1970s and early 1980s. Nonmanufacturing employment, however, has increased steadily for more than half a century. With the exception of mining, all of the nonmanufacturing industries employed more workers in 1988 than at any time before. The most phenomenal growth has occurred in services, where employment has grown from 3,045,000 in 1934 to 25,464,000 in 1988, an increase of 736 percent. The increase in federal government employment in the past five decades is interesting. It rose from 652,000 in 1934 to 996,000 in 1940. It then soared to 2,928,000 by 1944 because of World War II and has remained far in excess of pre-war levels ever since. It fell to 1,928,000 by 1950, then climbed steadily to 2,971,000 in 1988, the second consecutive year that total federal government employment in peacetime has exceeded the previous record set during World War II. Total payrolls for all nonagricultural industries combined stood at a record level of 106,039,000 in 1988, an increase of 309 percent in the past 54 years.

The percentage distribution of employment by industry given in Table 14 shows that while the actual numbers of Americans employed in manufacturing industries continued to grow during the post-war years, their share of the total labor force dwindled as other industrial groups exhibited faster growth rates. From a high of 38.5 percent of all American nonfarm workers in 1945, manufacturing's share of the job market declined steadily to only 18.4 percent in 1988. As in Pennsylvania, there were sizable declines in the relative proportion of jobs in mining, transportation and public utilities, and federal government, although the actual number of federal government workers increased to record levels, as noted above. Other industry groups increased their share of the total job market, with the service industries rising from a share of 10.5 percent of all nonagricultural jobs in 1945 to 24.0 percent in 1988.

Along with the shift of employment from manufacturing to nonmanufacturing has come a dramatic increase in the number of women holding jobs. The two phenomena are closely related. The increase in working women is attributable to many causes, including:

...the economic necessity of two paychecks in many households;
...the enormous increase in single-parent families;
...the increased divorce rate;
...the availability of day care;
...the women's rights movement;
...affirmative action;
...the increased social acceptability of working women;
...the increased educational attainment of women;
...profound changes in social mores.

However, perhaps the most important reason has been the growth in the nonmanufacturing industries, which are the traditional source of many of the jobs frequently held by women. This is clear from Table 15. In 1978 women held 40.8 percent of all jobs in the United States; by 1988 this figure had risen to 46.5 percent. In general, women were represented in larger numbers in the nonmanufacturing industries than in manufacturing. Women accounted For 32.9 percent of all manufacturing workers, but their distribution varied widely, from 13.7 percent of the employees in primary metals to 79.7 percent of the workers in apparel and textiles products. In the nonmanufacturing sector women held 49.5 percent of the jobs in 1988 (up from 44.1 percent just ten years earlier), ranging from a low of 10.8 percent in contract construction to a high of 62.4 percent in finance, insurance, and real estate. (It should be remembered that these figures apply to all jobs within an industry, including clerical and administrative staff, not just production workers. In some industries, such as mining and construction, most of the female workers are in clerical and other white-collar occupations.) In virtually all industries the percentage of female workers increased during the past decade; the only exceptions were in a few manufacturing industries, i.e., tobacco products, apparel and textiles, leather products, and (nominally) miscellaneous manufacturing.

TABLE 10

PENNSYLVANIA METROPOLITAN AREA 1/

EMPLOYEES ON NONAGRICULTURAL PAYROLLS BY MAJOR INDUSTRY GROUP
(in thousands)

INDUSTRY GROUP	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1987	1988
NONAGRICULTURAL WAGE AND SALARY	3,895.3	3,949.6	4,000.2	4,128.9	4,201.8	4,159.9	4,157.9	4,021.6	3,982.8	4,100.6	4,166.7	4,328.3	4,414.8
MANUFACTURING	1,153.7	1,150.3	1,156.1	1,177.6	1,191.3	1,135.2	1,120.8	1,009.1	944.8	964.6	934.7	886.5	889.0
NONMANUFACTURING	2,737.4	2,791.7	2,839.6	2,942.2	3,004.5	3,021.9	3,032.4	3,009.7	3,035.2	3,133.8	3,231.8	3,441.9	3,526.1
Mining	25.8	27.5	26.6	24.3	27.1	25.3	22.5	21.4	17.8	17.2	16.5	13.2	12.4
Contract Construction	160.1	158.1	159.9	176.0	179.8	172.0	163.3	153.1	150.3	159.6	169.7	198.8	204.5
Transportion and Public Utilities	225.9	225.6	230.3	236.4	241.2	231.8	226.8	218.0	210.5	215.9	211.5	216.9	222.2
Wholesale and Retail Trade	793.1	812.8	834.7	869.6	876.1	874.8	880.8	868.1	886.2	919.0	950.1	999.8	1,023.8
Finance, Insurance and Real Estate	188.5	192.6	198.2	208.0	215.1	219.7	223.7	222.1	225.1	234.2	242.6	271.5	273.6
Service	723.5	755.4	799.3	810.7	854.3	882.5	914.9	945.2	970.4	1,012.6	1,059.7	1,156.9	1,199.0
Government	620.9	623.0	610.7	617.0	610.3	613.1	600.7	581.1	575.4	575.6	581.6	585.2	590.8
Federal	120.0	120.9	115.2	116.0	117.1	117.4	119.4	119.1	118.5	120.0	123.7	125.9	125.8
State and Local	500.9	505.1	495.5	501.0	493.2	495.7	481.3	462.0	456.9	455.6	457.9	459.1	465.2

1/ PENNSYLVANIA METROPOLITAN AREA is the sum of all Pennsylvania Counties that are located in Metropolitan Statistical Areas (MSAs).

Data are annual averages for all years shown.
Data for 1975 through 1980 include information for the State College-Bellefonte LMA rather than the State College MSA.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 11

PENNSYLVANIA

EMPLOYEES ON NONAGRICULTURAL PAYROLLS BY MAJOR INDUSTRY GROUP
(in thousands)

INDUSTRY GROUP	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1988	RECORD HIGH 1/	RECORD LOW 2/
NONAGRICULTURAL WAGE AND SALARY	2,893.5	3,335.3	3,644.4	3,749.6	3,715.4	3,917.5	4,351.6	4,435.8	4,753.1	4,730.3	5,033.9	5,033.9 (1988)	2,701.5 (1939)
MANUFACTURING	1,134.3	1,485.4	1,485.5	1,515.0	1,444.5	1,494.1	1,528.8	1,334.8	1,328.2	1,089.6	1,055.8	1,653.5 (1953)	1,044.0 (1987)
NONMANUFACTURING	1,759.1	1,849.9	2,158.9	2,234.5	2,271.0	2,423.4	2,822.8	3,101.0	3,424.9	3,640.8	3,978.1	3,978.1 (1988)	1,640.1 (1939)
Mining	222.2	177.1	176.0	94.4	58.3	45.3	39.5	46.1	49.0	36.3	29.1	222.2 (1940)	29.1 (1988)
Contract Construction	87.9	75.4	157.1	175.5	154.7	165.5	192.0	184.5	190.1	187.1	230.8	230.8 (1988)	68.9 (1944)
Transportion and Public Utilities	270.4	319.3	330.7	317.4	278.6	263.4	267.5	256.5	263.3	240.6	252.3	347.2 (1951)	239.5 (1986)
Wholesale Trade	NA	NA	156.4	169.7	176.6	182.4	203.2	216.1	244.3	254.0	269.7	269.7 (1988)	148.8 (1947)
Retail Trade	NA	NA	483.2	501.4	508.0	529.9	613.3	670.8	744.0	813.4	881.4	881.4 (1988)	470.1 (1947)
Finance, Insurance and Real Estate	97.5	95.8	121.1	139.3	152.9	162.1	189.9	207.3	236.8	263.1	292.5	292.5 (1988)	89.9 (1939)
Service	294.3	303.8	395.7	440.7	505.8	566.5	698.8	798.5	974.1	1,166.1	1,328.0	1,328.0 (1988)	278.4 (1939)
Government	292.2	390.8	338.7	396.1	436.1	508.4	618.7	721.4	723.3	680.2	694.3	723.3 (1980)	286.8 (1939)
Federal	NA	NA	108.6	138.5	134.2	135.4	145.3	134.4	134.9	138.3	140.7	151.7 (1952)	107.4 (1948)
State and Local	NA	NA	230.1	257.6	302.0	373.0	473.3	587.0	588.4	541.7	553.7	591.2 (1978)	221.5 (1947)

1/ Highest employment figure recorded for years for which data are available.
2/ Lowest employment figure recorded for years for which data are available.

Data available back to 1947 for state and local government and for wholesale and retail trade, and to 1939 for other industries

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 12

PENNSYLVANIA

PERCENT DISTRIBUTION OF EMPLOYMENT BY INDUSTRY

INDUSTRY GROUP	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1988
NONAGRICULTURAL WAGE AND SALARY	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MANUFACTURING	39.2	44.5	40.8	40.4	38.9	38.1	35.1	30.1	27.9	23.0	21.0
NONMANUFACTURING	60.8	55.5	59.2	59.6	61.1	61.9	64.9	69.9	72.1	77.0	79.0
Mining	7.7	5.3	4.8	2.5	1.6	1.2	0.9	1.0	1.0	0.8	0.6
Contract Construction	3.0	2.3	4.3	4.7	4.2	4.2	4.4	4.2	4.0	4.0	4.6
Transportion and Public Utilities	9.3	9.6	9.1	8.5	7.5	6.7	6.1	5.8	5.5	5.1	5.0
Wholesale Trade	NA	NA	4.3	4.5	4.8	4.7	4.7	4.9	5.1	5.4	5.4
Retail Trade	NA	NA	13.3	13.4	13.7	13.5	14.1	15.1	15.7	17.2	17.5
Finance, Insurance and Real Estate	3.4	2.9	3.3	3.7	4.1	4.1	4.4	4.7	5.0	5.6	5.8
Service	10.2	9.1	10.9	11.8	13.6	14.5	16.1	18.0	20.5	24.7	26.4
Government	10.1	11.7	9.3	10.6	11.7	13.0	14.2	16.3	15.2	14.4	13.8
Federal	NA	NA	3.0	3.7	3.6	3.5	3.3	3.0	2.8	2.9	2.8
State and Local	NA	NA	6.3	6.9	8.1	9.5	10.9	13.2	12.4	11.5	11.0

Data are annual averages for all years shown.

Data available back to 1947 for state and local government and for wholesale and retail trade, and to 1939 for other industries

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 13

UNITED STATES

EMPLOYEES ON NONAGRICULTURAL PAYROLLS BY INDUSTRY GROUP
(in thousands)

INDUSTRY GROUP	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1988	RECORD HIGH 1/	RECORD LOW 2/
NONAGRICULTURAL WAGE AND SALARY	32,361	40,374	45,197	50,641	54,189	60,765	70,880	76,945	90,406	97,519	106,039	106,039 (1988)	25,940 (1934)
MANUFACTURING	10,985	15,524	15,241	16,882	16,796	18,062	19,367	18,323	20,285	19,260	19,539	21,040 (1979)	8,501 (1934)
NONMANUFACTURING	21,376	24,850	29,956	33,759	37,393	42,703	51,513	58,622	70,121	78,260	86,501	86,501 (1988)	17,439 (1934)
Mining	925	836	901	792	712	632	623	752	1,027	927	733	1,139 (1981)	606 (1968)
Contract Construction	1,311	1,147	2,364	2,839	2,926	3,232	3,588	3,525	4,346	4,673	5,293	5,293 (1988)	877 (1934)
Transportion and Public Utilities	3,038	3,906	4,034	4,141	4,004	4,036	4,515	4,542	5,146	5,238	5,584	5,584 (1988)	2,750 (1934)
Wholesale Trade	1,835	1,949	2,635	2,926	3,143	3,466	3,993	4,415	5,275	5,717	6,156	6,156 (1988)	1,822 (1943)
Retail Trade	4,914	5,365	6,751	7,610	8,248	9,250	11,047	12,645	15,035	17,356	19,206	19,206 (1988)	4,914 (1940)
Finance, Insurance and Real Estate	1,485	1,481	1,888	2,298	2,629	2,977	3,645	4,165	5,160	5,955	6,679	6,679 (1988)	1,304 (1934)
Service	3,665	4,222	5,357	6,240	7,378	9,036	11,548	13,892	17,890	22,000	25,464	25,464 (1988)	3,045 (1934)
Government	4,203	5,944	6,026	6,913	8,353	10,074	12,553	14,685	16,241	16,394	17,387	17,387 (1988)	4,203 (1940)
Federal	996	2,808	1,928	2,187	2,270	2,378	2,731	2,748	2,866	2,875	2,971	2,971 (1988)	652 (1934)
State and Local	3,207	3,136	[illegible]	4,726	6,083	7,696	9,822	11,937	13,375	13,519	14,416	14,416 (1988)	3,134 (1944)

1/ Highest employment figure recorded for years for which data are available.
2/ Lowest employment figure recorded for years for which data are available.

Data are annual averages for all years shown.

Data available back to 1940 for state and local government and for wholesale and retail trade, and to 1934 for other industries

SOURCE: Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, March 1989.

TABLE 14

UNITED STATES

PERCENT DISTRIBUTION OF EMPLOYMENT BY INDUSTRY

INDUSTRY GROUP	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1988
NONAGRICULTURAL WAGE AND SALARY	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MANUFACTURING	33.9	38.5	33.7	33.3	31.0	29.7	27.3	23.8	22.4	19.7	18.4
NONMANUFACTURING	66.1	61.5	66.3	66.7	69.0	70.3	72.7	76.2	77.6	80.3	81.6
Mining	2.9	2.1	2.0	1.6	1.3	1.0	0.9	1.0	1.1	1.0	0.7
Contract Construction	4.1	2.8	5.2	5.6	5.4	5.3	5.1	4.6	4.8	4.8	5.0
Transportion and Public Utilities	9.4	9.7	8.9	8.2	7.4	6.6	6.4	5.9	5.7	5.4	5.3
Wholesale Trade	5.7	4.8	5.8	5.8	5.8	5.7	5.6	5.7	5.8	5.9	5.8
Retail Trade	15.2	13.3	14.9	15.0	15.2	15.2	15.6	16.4	16.6	17.8	18.1
Finance, Insurance and Real Estate	4.6	3.7	4.2	4.5	4.9	4.9	5.1	5.4	5.7	6.1	6.3
Service	11.3	10.5	11.9	12.3	13.6	14.9	16.3	18.1	19.8	22.6	24.0
Government	13.0	14.7	13.3	13.7	15.4	16.6	17.7	19.1	18.0	16.8	16.4
Federal	3.1	7.0	4.3	4.3	4.2	3.9	3.9	3.6	3.2	2.9	2.8
State and Local	9.9	7.8	9.1	9.3	11.2	12.7	13.9	15.5	14.8	13.9	13.6

Data are annual averages for all years shown.

Data available back to 1940 for state and local government and for wholesale and retail trade, and to 1934 for other industries

SOURCE: Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, March 1989.

TABLE 15

UNITED STATES

PERCENT DISTRIBUTION OF INDUSTRY EMPLOYMENT, BY SEX
1978 AND 1988 ANNUAL AVERAGES

Industry Title	1978		1988	
	Male	Female	Male	Female
Nonagricultural Wage and Salary	59.2	40.8	53.5	46.5
Manufacturing Industries	69.6	30.4	67.1	32.9
Durable Goods	76.4	23.6	73.1	26.9
Lumber and Wood Products	85.8	14.2	83.8	16.2
Furniture and Fixtures	70.9	29.1	68.9	31.1
Stone, Clay and Glass Products	81.3	18.7	79.9	20.1
Primary Metal Industries	90.0	10.0	86.3	13.7
Fabricated Metal Products	79.5	20.5	77.3	22.7
Machinery, except Electrical	81.5	18.5	77.7	22.3
Electrical and Electronic Equipment	58.3	41.7	58.1	41.9
Transportation Equipment	85.3	14.7	80.6	19.4
Instruments and Related Products	57.8	42.2	56.3	43.7
Miscellaneous Manufacturing	53.1	46.9	53.5	46.5
Nondurable Goods	59.6	40.4	58.4	41.6
Food and Kindred Products	71.7	28.3	68.0	32.0
Tobacco Manufacturing	63.4	36.6	66.0	34.0
Textile Mill Products	52.8	47.2	51.8	48.2
Apparel and Other Textile Products	18.9	81.1	20.3	79.7
Paper and Allied Products	77.5	22.5	75.6	24.4
Printing and Publishing	61.7	38.3	56.7	43.3
Chemicals and Allied Products	76.5	23.5	70.8	29.2
Petroleum and Coal Products	88.2	11.8	85.0	15.0
Rubber and Miscellaneous Plastics	65.4	34.6	65.3	34.7
Leather and Leather Products	39.4	60.6	41.0	59.0
Nonmanufacturing Industries	55.9	44.1	50.5	49.5
Mining	91.0	9.0	86.6	13.4
Contract Construction	92.1	7.9	89.2	10.8
Transportation and Public Utilities	77.0	23.0	71.0	29.0
Wholesale Trade	75.2	24.8	70.1	29.9
Retail Trade	51.7	48.3	47.0	53.0
Finance, Insurance and Real Estate	42.5	57.5	37.6	62.4
Services	42.2	57.8	39.4	60.6
Government	53.8	46.2	48.6	51.4
Federal Government	68.4	31.6	64.3	35.7
State Government	55.6	44.4	51.1	48.9
Local Government	48.8	51.2	43.1	56.9

NOTE: Breakdown of industry employment by sex is not available for states or local areas. However, in most areas, the actual distribution of the sexes in particular industries is not likely to vary widely from the national averages.

SOURCE: Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, March 1979 and March 1989.

TABLE 16
PENNSYLVANIA
FIFTY LARGEST EMPLOYERS
MARCH 1989

RANK	NAME OF EMPLOYER
1	UNITED STATES GOVERNMENT
2 *	PENNSYLVANIA STATE GOVERNMENT
3	CITY OF PHILADELPHIA
4	SCHOOL DISTRICT OF PHILADELPHIA
5	SEARS, ROEBUCK & COMPANY
6	BELL TELEPHONE COMPANY
7	WESTINGHOUSE ELECTRIC CORP.
8	GENERAL ELECTRIC COMPANY
9	COMM. OF PA - P S U
10	UNIVERSITY OF PITTSBURGH
11	ACME MARKETS, INC
12	K-MART CORP.
13	TRUSTEES OF THE UNIVERSITY OF PENNA
14	J C PENNEY COMPANY, INC.
15	BETHLEHEM STEEL CORPORATION
16	COMM. OF PA - HIGHER EDUCATION
17	THE PRUDENTIAL INS. CO. OF AMERICA
18	PHILA. ELECTRIC COMPANY
19	WEIS MARKETS, INC.
20	STRAWBRIDGE & CLOTHIER
21	UNITED STATES STEEL CORP.
22	UNITED PARCEL SERVICE INC.
23	MELLON BANK
24	UNISYS CORPORATION
25	TEMPLE UNIVERSITY
26	AT & T TECHNOLOGIES, INC.
27	A M P INCORPORATED
28	PENNA POWER & LIGHT CO.
29	COMM OF PA - S E P T A
30	U S AIR, INC.
31	HERSHEY FOODS CORPORATION
32	HILLS DEPARTMENT STORES
33	THE BOEING COMPANY VERTOL
34	PPG INDUSTRIES, INC.
35	GIANT EAGLE, INC.
36	THE BOARD OF EDUCATION OF THE SCHOOL DIS. OF PGH.
37	GIANT FOOD STORES, INC.
38	BEVERLY CALIFORNIA, INC
39	ALLEGHENY COUNTY
40	THE PHILA. NATIONAL BANK
41	INT'L BUSINESS MACHINES CORP.
42	CITY OF PITTSBURGH
43	MECK & CO., INC.
44	ARMSTRONG WORLD IND., INC.
45	PENNSYLVANIA BLUE SHIELD
46	BOSCOV'S DEPT. STORE, INC.
47	SMITHKLINE BECKMAN, CORP.
48	AIR PRODUCTS & CHEMICALS, INC.
49	JOHN WANAMAKER, PHILA.
50	ALLEGHENY LUDLUM CORP.

* COMMONWEALTH OF PENNSYLVANIA INCLUDES ALL STATE EMPLOYMENT EXCEPT PENNSYLVANIA STATE UNIVERSITY, SEPTA, AND THE SYSTEM OF HIGHER EDUCATION.

SECTION III

INDUSTRY TRENDS AND DEVELOPMENTS

B. Industry Outlook

Nonagricultural wage and salary employment statewide is expected to reach 5,102,000 by 1995. This represents an increase of 362,900 jobs from 1985 as compared with an increase of 300,100 jobs between 1975 and 1985.

The structure of employment in Pennsylvania has undergone considerable change in recent decades. Manufacturing's share of nonagricultural wage and salary employment has dropped from 38.9 percent in 1960 to 35.1 percent in 1970 to 23.0 percent in 1985. The primary metal industry led the decline, with its share of employment dropping from 6.8 percent in 1960 to 2.2 percent in 1985, followed by apparel and other textile products, with 4.5 percent in 1960 and 2.1 percent in 1985. In contrast, nonmanufacturing industries, particularly services, have experienced rapid growth and have increased their share of nonagricultural wage and salary employment from 61.1 percent in 1960 to 77.0 percent in 1985.

Between 1960 and 1970, nonagricultural wage and salary employment in Pennsylvania rose by 17.1 percent. The nonmanufacturing sector had a gain of 24.3 percent while manufacturing grew by 5.8 percent. The most rapid increase among broad industry groups, was posted by the government segment of nonmanufacturing, which grew at an annual average compounded rate of 3.6 percent or 41.9 percent for the decade. Expansion of government during the 1960's reflected not only the strong demand for teachers and other educational personnel as the baby-boom generation entered school, but also the effects of the Vietnam war buildup, and increases in government services resulting from the "Great Society" and other programs.

During the 1970's, job growth continued in nonmanufacturing industries with the exception of slight employment losses in federal government, contract construction, and transportation and public utilities. Between 1970 and 1980, employment rose 39.4 percent in services, 24.3 percent in state and local government, 24.7 percent in finance, insurance and real estate, and 21.0 percent in trade. During the same time period manufacturing employment dropped by 13.1 percent. This decline was led by a 23.5 percent loss in apparel and other textile products and an 18.1 percent loss in primary metals.

Over the 1975-1985 period, employment in manufacturing dropped 245,700 jobs while nonmanufacturing employment soared by 547,800 to 3,646,800 in 1985, a figure higher than the total of all nonagricultural jobs in the state prior to the 1950s. In the manufacturing division, employment in both the durable goods and nondurable goods sectors fell during this period. Primary metals and apparel and textile products again bore the brunt of the job erosion. Annual average 1985 employment in the nonmanufacturing division increased by 547,800 over the 1975 total. Specific nonmanufacturing industry lines providing record job levels during 1985 were services, retail trade, finance, insurance and real estate, and wholesale trade.

During the 1985-1995 period, the shift from manufacturing to nonmanufacturing employment is expected to continue. Nonmanufacturing employment is projected to increase by 13.7 percent, contrasted with a loss of 12.5 percent for manufacturing industries. This will result in a net gain of 362,900 jobs, an increase of 7.7 percent over the ten-year period. The services industry, paced by health services and business services, is projected to have the largest employment gain among broad industry groups. The employment shares of trade, construction, finance, insurance, and real estate are also expected to rise through 1995. Although small gains are projected for government, transportation and public utilities, these industries will represent smaller portions of all jobs by 1995.

Projected declines in durable goods industries account for three out of four job losses in the manufacturing sector. Once again, the greatest losses are expected to occur in the primary metal industries. The only durable goods industry showing employment growth potential is lumber and wood products.

Two out of three of the projected job losses in nondurable goods will likely occur in the apparel and other textile products industry, as foreign imports and domestic competition continue to plague this industry. Employment growth is projected for printing and publishing, chemicals and allied products, and food and kindred products industries.

TABLE 17

SUMMARY TABLE

PENNSYLVANIA AND MAJOR LABOR MARKET AREA TOTAL NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT:
ANNUAL AVERAGE 1985 AND PROJECTED 1995

[Data are a count of jobs in thousands]

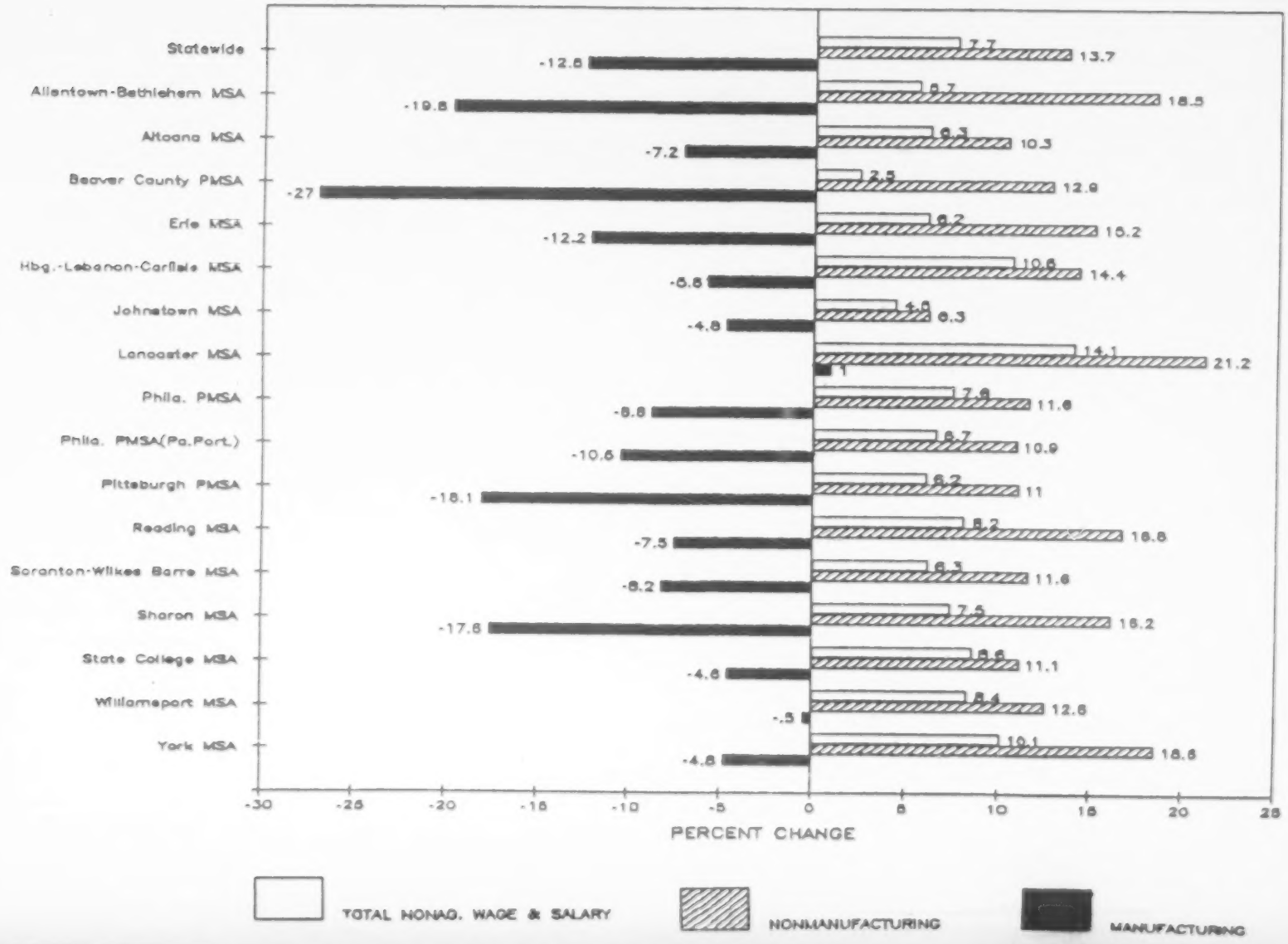
State and Major Labor Market Areas	Total Nonagricultural Wage and Salary Employment			
	Employment		Change '85-'95	
	1985	1995	#	%
Statewide	4,739.1	5,102.0	362.9	7.7
Allentown-Bethlehem MSA	262.8	277.9	15.1	5.7
Altoona MSA	49.1	52.2	3.1	6.3
Beaver County PMSA	53.5	54.8	1.3	2.5
Erie MSA	109.3	116.0	6.7	6.2
Harrisburg-Lebanon-Carlisle MSA	276.3	305.5	29.2	10.6
Johnstown MSA	76.0	79.4	3.4	4.5
Lancaster MSA	165.9	189.4	23.5	14.1
Philadelphia PMSA	2,047.9	2,204.0	156.1	7.6
Philadelphia PMSA (Pa. Portion)	1,652.2	1,763.0	110.8	6.7
Pittsburgh PMSA	850.0	903.0	53.0	6.2
Reading MSA	142.3	154.0	11.7	8.2
Scranton-Wilkes Barre MSA	275.2	292.5	17.3	6.3
Sharon MSA	40.0	43.0	3.0	7.5
State College MSA	49.4	53.7	4.3	8.8
Williamsport MSA	45.5	49.3	3.8	8.4
York MSA	161.3	177.6	16.3	10.1

Percent change based on unrounded figures.

SOURCE: Bureau of Research and Statistics, Dept. of Labor and Industry

GRAPH 1

PENNSYLVANIA & MAJOR LABOR MARKET AREAS
PERCENT CHANGE IN EMPLOYMENT BY BROAD INDUSTRIAL CATEGORIES
FROM 1985 TO PROJECTED 1995



GRAPH 2

PENNSYLVANIA
PERCENT DISTRIBUTION OF NONAGRICULTURAL WAGE & SALARY EMPLOYMENT
BY MAJOR INDUSTRY DIVISIONS
FOR ESTIMATED 1975 & 1985 AND PROJECTED 1995

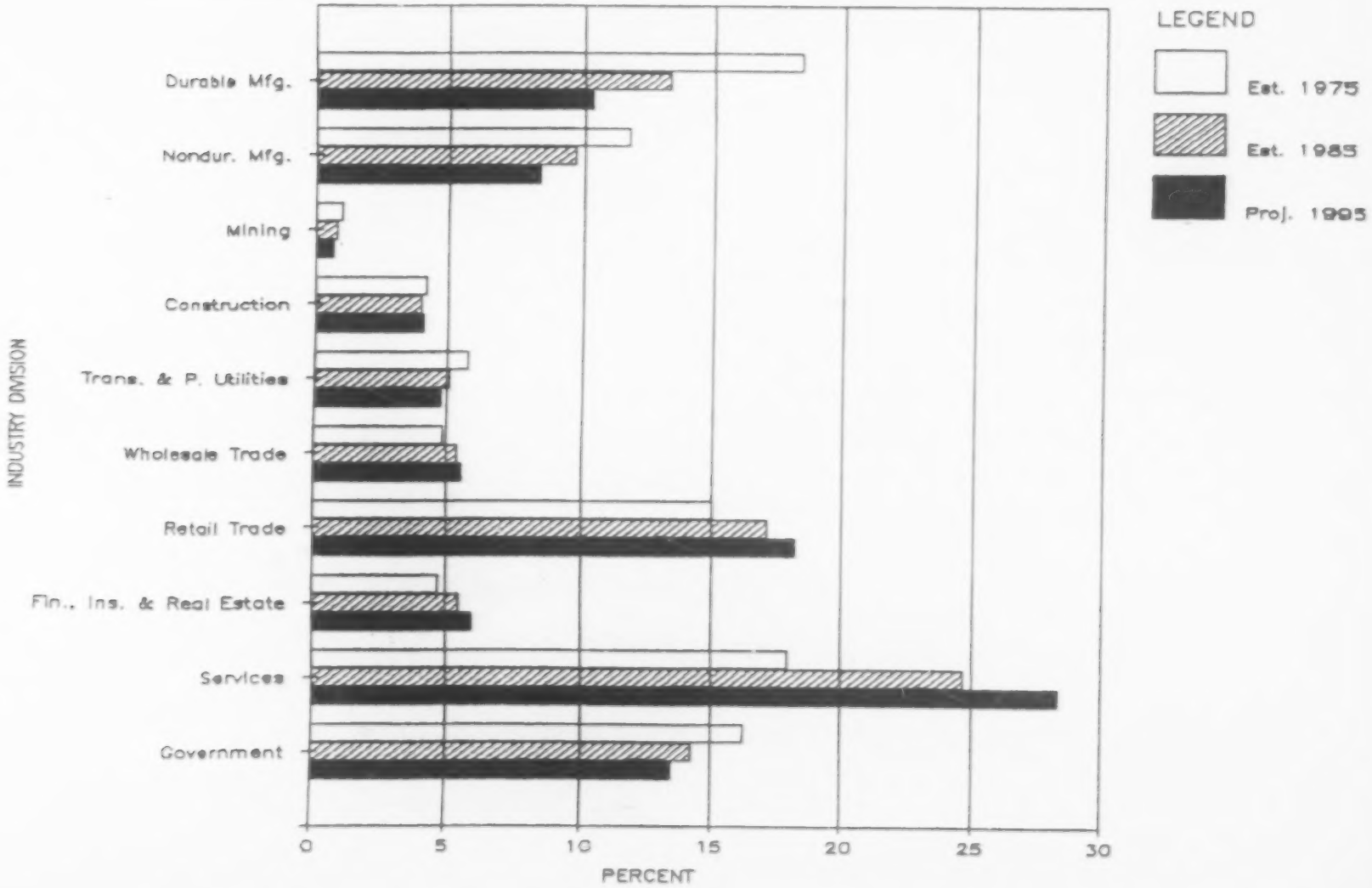


TABLE 18

PENNSYLVANIA

PROJECTED EMPLOYMENT CHANGES FOR SELECTED INDUSTRIES

FROM 1985 TO 1995

Largest Job Gains by Volume	Employment Gain
1. Health Services [Private]	94,300
2. Business Services	79,900
3. Eating & Drinking Places	53,100
4. Wholesale Trade - Durable Goods	27,600
5. Social Services	22,250
6. Food Stores	19,870
7. Educational Services [Private]	16,000
8. General Merchandise Stores	13,450
9. Miscellaneous Retail	12,900
10. Banking	11,600
11. Insurance Carriers	10,800
12. Legal Services	10,600
13. Miscellaneous Services	10,400
14. Hotels & Other Lodging Places	10,200
15. Special Trade Contractors	8,900

Fastest Growing by Rate of Change	% Increase
1. Holding & Other Investment Offices	44.8
2. Business Services	42.7
3. Legal Services	33.8
4. Social Services	32.1
5. Miscellaneous Repair Services	28.5
6. Transportation Services	26.0
7. Health Services [Private]	24.4
8. Security, Commodity Brokers & Serv.	22.4
9. Credit Agencies Other Than Banks	21.6
10. Eating & Drinking Places	21.5
11. Transportation by Air	20.3
11. Amusement & Recreation Services	20.3
13. Hotels & Other Lodging Places	19.9
14. Miscellaneous Services	19.5
15. Wholesale Trade - Durable Goods	17.4

Most Job Loss by Volume	Employment Loss
1. Primary Metal Industries	33,650
2. Apparel & Other Textile Products	21,900
3. Machinery, Exc. Electrical	19,850
4. Electric & Electronic Equipment	15,700
5. Fabricated Metal Products	14,350
6. Transportation Equipment	10,950
7. Textile Mill Products	8,800
8. Stone, Clay & Glass Products	5,400
9. Railroad Transportation	5,200
10. Leather & Leather Products	3,200
11. Petroleum & Coal Products	3,000
12. Bituminous Coal & Lignite Mining	2,600
13. Instruments & Related Products	2,500
14. Furniture & Fixtures	1,800
14. Federal Government	1,800

Most Rapidly Declining by Rate of Change	% Decrease
1. Metal Mining	100.0
2. Tobacco Manufactures	65.2
3. Primary Metal Industries	32.2
4. Leather & Leather Products	28.3
5. Petroleum & Coal Products	23.8
6. Railroad Transportation	22.9
7. Apparel & Other Textile Products	21.9
8. Textile Mill Products	21.3
9. Machinery, Exc. Electrical	17.4
10. Transportation Equipment	17.2
11. Fabricated Metal Products	15.8
12. Electric & Electronic Equipment	15.0
13. Stone, Clay & Glass Products	11.3
14. Bituminous Coal & Lignite Mining	11.0
15. Anthracite Mining	9.8

SOURCE: Bureau of Research and Statistics, Pa. Dept. of Labor and Industry

TABLE 19

PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

(Data are a count of jobs)

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
	TOTAL ALL NONAG. WAGE & SALARY IND.	4,739,100	5,102,000	362900	7.7	36290
	TOTAL MANUFACTURING INDUSTRIES	1,090,860	954,000	-136860	-12.5	-13686
	TOTAL DURABLE GOODS	629,000	525,500	-103500	-16.5	-10350
24	LUMBER & WOOD PRODUCTS	24,000	25,800	1800	7.5	180
243	Millwork, plywood & structural	7,190	8,000	820	11.4	82
	Other lumber & wood products	16,820	17,800	980	5.8	98
25	FURNITURE & FIXTURES	20,400	18,600	-1800	-8.8	-180
251	Household furniture	8,060	7,000	-1060	-13.2	-106
252	Office furniture	5,650	5,300	-350	-6.2	-35
	Other furniture & fixtures	6,690	6,300	-390	-5.8	-39
32	STONE, CLAY & GLASS PRODUCTS	47,900	42,500	-5400	-11.3	-540
322	Glass & glassware, pressed or blown	11,900	10,100	-1800	-15.1	-180
324	Hydraulic cement	2,100	1,800	-300	-14.3	-30
325	Structural clay products	4,900	4,200	-700	-14.3	-70
326	Pottery & related products	3,800	3,300	-500	-13.2	-50
327	Concrete, gypsum & plaster products	7,500	7,100	-400	-5.3	-40
	Other stone, clay & glass products	17,700	16,000	-1700	-9.6	-170
33	PRIMARY METAL INDUSTRIES	104,850	71,000	-33850	-32.2	-3385
331	Blast furnace & basic steel products	67,650	42,500	-25150	-37.2	-2515
332	Iron & steel foundries	10,850	7,800	-3050	-28.1	-305
335	Nonferrous rolling & drawing	12,700	10,000	-2700	-21.3	-270
336	Nonferrous foundries	5,900	4,800	-1100	-18.6	-110
	Other primary metal industries	7,550	5,900	-1650	-21.9	-165
34	FABRICATED METAL PRODUCTS	91,850	77,500	-14350	-15.6	-1435
341	Metal cans & shipping containers	2,700	2,000	-700	-25.9	-70
342	Cutlery, hand tools & hardware	5,450	4,800	-650	-11.9	-65
343	Plumbing & heating exc. electrical	2,210	1,700	-510	-23.1	-51
344	Fabricated structural metal products	31,910	28,100	-3810	-11.9	-381
345	Screw machine products, bolts, etc.	6,610	5,100	-1510	-22.8	-151
346	Metal forgings & stampings	15,630	12,000	-3630	-23.2	-363
347,8	Metal serv. & ordnance n.e.c.	8,340	7,300	-1040	-12.5	-104
349	Miscellaneous fabricated metal prods.	19,000	16,500	-2500	-13.2	-250

TABLE 19 (Cont.)

PENNSYLVANIA

ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY

ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
35	MACHINERY, EXC. ELECTRICAL	114,350	94,500	-19850	-17.4	-1985
351	Engines & Turbines	5,200	3,700	-1500	-28.8	-150
352	Farm & garden machinery	3,200	2,700	-500	-15.6	-50
353	Construction & related machinery	16,700	12,500	-4200	-25.1	-420
354	Metal working machinery	18,900	15,700	-3200	-16.9	-320
355	Special industry machinery	9,200	7,100	-2100	-22.8	-210
356	General industrial machinery	22,000	17,300	-4700	-21.4	-470
357	Office and computing machines	14,420	15,000	580	4.0	58
358	Refrigeration & service industry mach.	9,800	8,300	-1300	-13.5	-130
359	Miscellaneous machinery, exc. elec.	15,130	12,200	-2930	-19.4	-293
36	ELECTRIC & ELECTRONIC EQUIPMENT	104,400	88,700	-15700	-15.0	-1570
361	Electric distributing equipment	8,000	6,000	-2000	-25.0	-200
362	Electrical industrial apparatus	16,900	13,500	-3400	-20.1	-340
363	Household appliances	3,200	2,500	-700	-21.9	-70
364	Electric lighting & wiring equipment	21,200	19,000	-2200	-10.4	-220
366	Communication equipment	10,300	9,000	-1300	-12.6	-130
367	Electronic components & accessories	35,800	31,000	-4600	-12.9	-460
	Other electric & electronic equipment	9,200	7,700	-1500	-16.3	-150
37	TRANSPORTATION EQUIPMENT	63,750	52,800	-10950	-17.2	-1095
371	Motor vehicles & equipment	25,500	20,800	-4700	-18.4	-470
372	Aircraft & parts	10,200	9,500	-700	-6.9	-70
373	Ship & boat building & repairing	2,100	1,300	-800	-38.1	-80
374	Railroad equipment	11,300	7,800	-3500	-31.0	-350
	Other transportation equipment	14,650	13,400	-1250	-8.5	-125
38	INSTRUMENTS & RELATED PRODUCTS	37,600	35,100	-2500	-6.6	-250
382	Measuring & controlling devices	17,100	15,000	-2100	-12.3	-210
384	Medical instruments & supplies	11,300	11,200	-100	-0.9	-10
	Other instruments & related products	9,200	8,900	-300	-3.3	-30
39	MISCELLANEOUS MANUFACTURING INDUSTRIES	20,100	19,000	-1100	-6.5	-110

TABLE 19 (Cont.)
PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
	TOTAL NONDURABLE GOODS	461,980	428,500	-33380	-7.2	-3338
20	FOOD & KINDRED PRODUCTS	90,500	91,800	1300	1.4	130
201	Meat products	13,500	14,500	1000	7.4	100
202	Dairy products	10,600	11,000	400	3.8	40
203	Preserved fruits & vegetables	11,200	11,400	200	1.8	20
204	Grain mill products	5,500	6,000	500	9.1	50
205	Bakery products	17,100	16,700	-400	-2.3	-40
206	Sugar & confectionery products	14,200	13,900	-300	-2.1	-30
208	Beverages	8,600	8,400	-200	-2.3	-20
	Other food & kindred products	9,800	9,900	100	1.0	10
21	TOBACCO MANUFACTURES	2,300	800	-1500	-65.2	-150
22	TEXTILE MILL PRODUCTS	31,000	24,400	-6600	-21.3	-660
222	Weaving mills, synthetics	4,000	3,400	-600	-15.0	-60
225	Knitting Mills	13,000	10,100	-2900	-22.3	-290
227	Floor covering mills	3,000	2,700	-300	-10.0	-30
228	Yarn & thread mills	2,800	2,100	-700	-25.0	-70
	Other textile mill products	8,200	6,100	-2100	-25.6	-210
23	APPAREL & OTHER TEXTILE PRODUCTS	100,200	78,300	-21900	-21.9	-2190
231	Men's & boys' suits & coats	13,000	9,500	-3500	-26.9	-350
232	Men's & boys' furnishings	16,400	11,200	-5200	-31.7	-520
233	Women's & misses' outerwear	43,300	34,000	-9300	-21.5	-930
234	Women's & children's undergarments	9,800	8,500	-1300	-13.3	-130
236	Children's outerwear	6,300	5,700	-600	-9.5	-60
	Other apparel & textile products	11,400	9,400	-2000	-17.5	-200
26	PAPER & ALLIED PRODUCTS	41,310	39,800	-1510	-3.7	-151
262	Paper mills exc. building paper	10,400	9,800	-600	-5.8	-60
265	Paperboard containers & boxes	12,600	11,800	-800	-6.3	-80
	Other paper & allied products	18,310	18,200	-110	-0.6	-11
27	PRINTING & PUBLISHING	76,200	79,300	3100	4.1	310
271	Newspapers	22,800	22,000	-800	-2.7	-80
273	Books	5,140	5,300	160	3.1	16
275	Commercial printing	26,300	28,700	2400	9.1	240
276	Manifold business forms	5,080	5,700	620	12.2	62
	Other printing & publishing	17,080	17,600	520	3.0	52

TABLE 19 (Cont.)

PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

(Data are a count of jobs)

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
28	CHEMICALS & ALLIED PRODUCTS	59,800	61,300	1500	2.5	150
281	Industrial inorganic chemicals	9,900	10,100	200	2.0	20
282	Plastic materials & synthetics	8,100	7,700	-400	-4.9	-40
283	Drugs	19,600	22,500	2900	14.8	290
284	Soap, cleaners & toilet goods	3,900	4,100	200	5.1	20
285	Paints & allied products	3,800	3,400	-400	-10.5	-40
	Other chemicals & allied products	14,500	13,500	-1000	-6.9	-100
29	PETROLEUM & COAL PRODUCTS	12,600	9,600	-3000	-23.8	-300
291	Petroleum refining	10,000	7,600	-2400	-24.0	-240
	Other petroleum & coal products	2,600	2,000	-600	-23.1	-60
30	RUBBER & MISC. PLASTICS PRODUCTS	36,650	35,100	-1550	-4.2	-155
301	Tires & inner tubes	2,000	800	-1200	-60.0	-120
306	Fabricated rubber products, n.e.c.	4,300	3,900	-400	-9.3	-40
307	Miscellaneous plastics products	28,300	28,800	500	1.8	50
	Other rubber & misc. plastics products	2,050	1,600	-450	-22.0	-45
31	LEATHER & LEATHER PRODUCTS	11,300	8,100	-3200	-28.3	-320
314	Footwear, exc. rubber	8,700	6,200	-2500	-28.7	-250
	Other leather & leather products	2,600	1,900	-700	-26.9	-70
	TOTAL NONMANUFACTURING INDUSTRIES	3,648,240	4,148,000	499760	13.7	49976
10-14	MINING	36,340	33,600	-2740	-7.5	-274
10	METAL MINING	20	0	-20	-100.0	-2
11	ANTHRACITE MINING	2,440	2,200	-240	-9.8	-24
12	BITUMINOUS COAL & LIGNITE MINING	23,600	21,000	-2600	-11.0	-260
13	OIL & GAS EXTRACTION	5,680	6,000	320	5.6	32
14	NONMETALLIC MINERALS, EXCEPT FUELS	4,600	4,400	-200	-4.3	-20

TABLE 19 (Cont.)

PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
15-17	CONSTRUCTION	189,800	209,000	19400	10.2	1940
15	GENERAL BUILDING CONSTRUCTION	51,200	57,900	6700	13.1	670
16	HEAVY CONSTRUCTION CONTRACTORS	31,900	36,000	4100	12.9	410
17	SPECIAL TRADE CONTRACTORS	106,500	115,100	8600	8.1	860
40-49	TRANSPORTATION & PUBLIC UTILITIES	239,600	245,500	5900	2.5	590
40	RAILROAD TRANSPORTATION	22,700	17,500	-5200	-22.9	-520
41	LOCAL & INTERURBAN PASSENGER TRANSIT	20,700	22,500	1800	8.7	180
42	TRUCKING & WAREHOUSING	86,200	89,700	3500	5.0	350
44	WATER TRANSPORTATION	4,800	4,400	-400	-8.3	-40
45	TRANSPORTATION BY AIR	12,300	14,800	2500	20.3	250
46	PIPE LINES, EXCEPT NATURAL GAS	700	700	0	0.0	0
47	TRANSPORTATION SERVICES	10,400	13,100	2700	26.0	270
48	COMMUNICATION	48,700	47,500	-1200	-2.5	-120
49	ELECTRIC, GAS & SANITARY SERVICES	53,100	55,300	2200	4.1	220
491	Electric services	26,900	28,000	1100	4.1	110
492	Gas production & distribution	8,800	8,400	-400	-4.5	-40
	Other electric, gas & sanitary services	17,400	18,900	1500	8.6	150
50-51	WHOLESALE TRADE	253,800	287,000	33200	13.1	3320
50	WHOLESALE TRADE - DURABLE GOODS	158,400	186,000	27600	17.4	2760
51	WHOLESALE TRADE - NONDURABLE GOODS	95,400	101,000	5600	5.9	560

TABLE 19 (Cont.)

PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

(Data are a count of jobs)

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
52-59	RETAIL TRADE	815,680	933,200	117520	14.4	11752
52	BUILDING MATERIALS & GARDEN SUPPLIES	27,200	30,700	3500	12.9	350
53	GENERAL MERCHANDISE STORES	128,550	142,000	13450	10.5	1345
531	Department stores	115,050	128,000	12950	11.3	1295
	Other general merchandise stores	13,500	14,000	500	3.7	50
54	FOOD STORES	143,530	163,400	19870	13.8	1987
541	Grocery stores	119,790	136,000	16210	13.5	1621
	Other food stores	23,740	27,400	3660	15.4	366
55	AUTOMOTIVE DEALERS & SERVICE STATIONS	85,300	93,300	8000	9.4	800
56	APPAREL & ACCESSORY STORES	46,800	50,100	3300	7.1	330
57	FURNITURE & HOME FURNISHINGS STORES	30,500	33,900	3400	11.1	340
58	EATING & DRINKING PLACES	246,900	300,000	53100	21.5	5310
59	MISCELLANEOUS RETAIL	106,900	119,800	12900	12.1	1290
60-67	FINANCE, INSURANCE & REAL ESTATE	282,500	304,300	41800	15.9	4180
60	BANKING	84,200	95,800	11600	13.8	1160
602	Commercial & stock savings banks	77,300	88,000	10700	13.8	1070
	Other banking	6,900	7,800	900	13.0	90
61	CREDIT AGENCIES OTHER THAN BANKS	25,900	31,500	5600	21.6	560
62	SECURITY, COMMODITY BROKERS & SERVICES	11,600	14,200	2600	22.4	260
63	INSURANCE CARRIERS	74,700	85,500	10800	14.5	1080
631	Life insurance	29,300	32,200	2900	9.9	290
633	Fire, marine & casualty insurance	28,800	33,000	3200	10.7	320
	Other insurance carriers	15,600	20,300	4700	30.1	470

TABLE 19 (Cont.)

PENNSYLVANIA

ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY

ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
64	INSURANCE AGENTS, BROKERS & SERVICE	22,650	26,500	3850	17.0	385
65	REAL ESTATE	37,400	42,300	4900	13.1	490
66	COMBINED REAL ESTATE, INSURANCE, ETC.	800	900	100	12.5	10
67	HOLDING & OTHER INVESTMENT OFFICES	5,250	7,600	2350	44.8	235
70-89	SERVICES	1,171,120	1,448,400	277280	23.7	27728
70	HOTELS & OTHER LODGING PLACES	51,200	61,400	10200	19.9	1020
72	PERSONAL SERVICES	49,180	56,700	7520	15.3	752
73	BUSINESS SERVICES	187,100	267,000	79900	42.7	7990
75	AUTOMOTIVE REPAIR, SERVICES & GARAGES	33,120	38,000	4880	14.7	488
78	MISCELLANEOUS REPAIR SERVICES	14,630	18,800	4170	28.5	417
78	MOTION PICTURES	5,630	5,600	-30	-0.5	-3
79	AMUSEMENT & RECREATION SERVICES	39,000	46,900	7900	20.3	790
80	HEALTH SERVICES (Excl. State & Local government-run hospitals)	387,200	481,500	94300	24.4	9430
805	Nursing & personal care facilities	64,800	91,000	26200	40.4	2620
806	Hospitals	216,700	245,000	28300	13.1	2830
	Other health services	105,700	145,500	39800	37.7	3980
81	LEGAL SERVICES	31,400	42,000	10600	33.8	1060
82	EDUCATIONAL SERVICES (excl. State & Local govt.-run schools,colleges & univ.)	138,400	154,400	16000	11.6	1600
83	SOCIAL SERVICES	69,250	91,500	22250	32.1	2225
84	MUSEUMS, BOTANICAL, ZOOLOGICAL GARDENS	1,770	1,800	30	1.7	3

TABLE 19 (Cont.)

PENNSYLVANIA
ESTIMATED AND PROJECTED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE: 1985 AND 1995

[Data are a count of jobs]

SIC	Industry Title	Estimated 1985 Employment	Projected 1995 Employment	Employment Change 1985-95		
				Net Change	Percent Change	Annual Average Change
86	MEMBERSHIP ORGANIZATIONS	94,070	98,100	4030	4.3	403
89	MISCELLANEOUS SERVICES	53,300	63,700	10400	19.5	1040
	OTHER SERVICES	15,870	21,000	5130	32.3	513
	GOVERNMENT	679,600	687,000	7400	1.1	740
	FEDERAL GOVERNMENT	137,800	136,000	-1800	-1.3	-180
	Post office	39,700	40,000	300	0.8	30
	Other Federal Government	98,100	96,000	-2100	-2.1	-210
	STATE GOVERNMENT	147,500	151,000	3500	2.4	350
	State education	38,990	42,500	3510	9.0	351
	Other State Government	108,510	108,500	-10	.0	-1
	LOCAL GOVERNMENT	394,300	400,000	5700	1.4	570
	Local education	230,010	238,500	8490	3.7	849
	Other Local Government	164,290	161,500	-2790	-1.7	-279

SOURCE: Bureau of Research and Statistics, Pa. Dept. of Labor and Industry

C. Income and Wage Characteristics and Trends

Per capita income by county for the period 1970-1979 is given in Table 20 and for the period 1980-1987 in Table 21. Per capita income is total income from all sources divided by total population. During this seventeen-year period, income in Pennsylvania increased by 276 percent, slightly below the national average of 282 percent. Except for the period 1975-1977, per capita income in the state was slightly lower than the national average. Montgomery, Chester, Delaware, and Bucks counties, in the southeastern corner of the state, enjoyed the highest per capita income in 1987, all in excess of $18,000 per year and significantly higher than the state average of $15,208. Six counties (Sullivan, Bedford, Potter, Greene, Tioga, and Huntingdon) posted annual income figures of less than $11,000 per person. Per capita income in Montgomery County, at $22,602 per year, was more than double the $10,378 figure in Huntingdon County. All 67 Pennsylvania counties posted net increases in income between 1986 and 1987.

State data on per capita income in 1988 can be found in Table 22. Pennsylvania's average of $16,233 was the 20th highest among the fifty states, the same as the 1987 ranking and up one notch from the 1986 ranking, but still $256 lower than the national average. For the third year in a row, Connecticut held the top position on the list with an average per capita income of $23,059, followed by New Jersey, the District of Columbia, and Massachusetts. Alaska, which had held the number one spot for several years until being replaced by Connecticut in 1986, fell from fourth in 1987 to seventh in 1988 (or eighth, if the District of Columbia is assigned a numerical ranking). As in past years, Mississippi reported the lowest per capita income at $11,116 in 1988. During the period 1980-1988, Pennsylvania's per capita income increased by 64.1 percent. Although impressive, this was somewhat lower than the national average of 66.2 percent increase in eight years. Income in New Hampshire increased fastest over this period, rising by 98.5 percent, while the slowest growth in income was just 20.0 percent in Wyoming.

Table 23 gives average annual wages for counties and Metropolitan Statistical Areas in Pennsylvania for the period 1983-1988. Annual average wages differs considerably from per capita income, since it is computed by dividing total earned wages (excluding benefits and nonmonetary compensation) by the total number of employed persons. Average wages thus does not include income from non-wage sources (e.g. interest, rents, and dividends) and is based only on the number of people with jobs. Per capita income, on the other hand, includes all sources of income, but is divided by total population, including persons who are not in the labor force. For the third consecutive year, the Philadelphia PMSA posted the highest average wages in 1988, increasing to $24,236. Among the state's 67 counties, Philadelphia, Montgomery, Chester, Allegheny, Delaware, Greene, and Wyoming counties had the highest average annual wages, all in excess of $22,000, with Philadelphia County averaging more than $25,000. The counties with the lowest average wages were Perry, with $13,396 and Sullivan, with $14,000.

Although the per capita income figures in Table 21 are for 1987 and the average annual wages in Table 23 are for 1988, it is illuminating to see where individual counties rank on the two lists. One would normally expect a county with high wages to have a correspondingly high per capita income, and usually this is the case: Montgomery County, for example, had the highest per capita income and the second-highest annual wages, while Sullivan ranked 66th in terms of wages and 62nd in terms of per capita income. However, some counties have widely different rankings in the two lists. Greene County is a particularly interesting case in point. The county ranked sixth among the 67 counties in Pennsylvania in terms of annual average wages, but it ranked 65th in terms of per capita income. This apparent incongruity can be explained by noting that Greene County is rural, has little industry, and has high unemployment. The explanation for the apparent paradox of low income/high wages lies in its high unemployment rate (11.1 percent in 1988) and in its largest industry, coal mining. Mining is the highest-paying industry in Pennsylvania, and because so many Greene County residents work in mining, the average wage, which is based solely on employed people, is high. However, many Greene County residents are unemployed and have little or no income, so that per capita income, which is based on total population, is low. Conversely, Pike County ranked 13th in terms of per capita income but only 58th in terms of average wages. These examples illustrate that a single statistic alone often fails to tell the complete story about an area's economy; it is usually instructive to consider other related figures in attempting to draw conclusions about economic conditions.

Table 24 gives median weekly earnings of full-time wage and salary workers in occupations which employ 50,000 or more persons nationwide. These 1988 annual average figures are national data; breakdowns for men and women are provided. Table 24 is a condensation of a longer table published by the U.S. Department of Labor. Overall, the average male American worker earned $449 per week in 1988, compared with $315 for the average female worker. Thus, the average working woman earned just 70.2 cents for every dollar earned by the average working man. For many of these occupations, female earnings are not shown, because the number of women in the occupation is fewer than 50,000, but for those occupations employing at least 50,000 female workers, only two occupations in the longer version of the table showed higher earnings for women than for men. These were guards and police (except those in public service), where women earned an average of $283 per week, compared with $272 for men, and miscellaneous food preparation occupations, where women averaged $194 per week, $18 more than men earned.

Among broad occupational groups there was considerable variation in the differential between male and female earnings. The occupations in which women's earnings came closest to those of men (i.e. within 85-to-100 percent of men's earnings) were secretaries, stenographers, and typists; social, recreation, and religious workers; guards; mechanics and repairers; police and detectives; science technicians; health assessment and treating occupations; health technologists and technicians; farming, forestry, and fishing; and engineers, architects, and surveyors. The widest gaps in earnings (i.e. with women earning only 50-to-70 percent of what men earned) were in service occupations; machine operators, assorted materials; operators, fabricators, and laborers; precisions production operators; and sales occupations.

Table 25 presents data obtained via records of employers reporting wages for unemployment compensation purposes. Provided are the number of employers in each industry group in Pennsylvania, the average number of employees, total wages paid in calendar year 1988, and the annual average wage for each employee. The principal value of the data is to show the relative importance of individual industries to the state's economy in terms of the amount of payroll they provide.

Comparisons of average weekly earnings, average weekly hours worked, and average hourly earnings for manufacturing production workers for the most recent five years in Pennsylvania's fifteen major labor market areas are given in Table 26. The smaller steel-making areas have tended to post the highest average weekly earnings, since wages in the steel industry are high, and steel accounts for a large proportion of jobs in some of the smaller Metropolitan Statistical Areas. Beaver County recorded the highest weekly earnings during the period 1984-1986, while the Sharon area had the top earnings in 1987 and 1988. During the past half-decade, average hourly earnings have risen steadily in Pennsylvania, and there has also been a general increase in the average number of hours worked. The result has been a definite trend for average weekly earnings to increase throughout most of the state. Between 1984 and 1988, the average nonsupervisory manufacturing worker's weekly take-home pay rose by 12.9 percent. This was, however, one percent less than the increase in the consumer price index, which is the usual measure of inflation. Thus, the earnings of Pennsylvania's factory workers did not quite keep pace with inflation.

Recognizing the need for accurate and up-to-date wage data for local labor market areas, the Bureau of Research and Statistics of the Pennsylvania Department of Labor and Industry has undertaken the project of conducting Occupational Wage Surveys in many areas of the state. These surveys are based on voluntary mail survey forms completed by a sample of local employers. In some areas, the sample included all employers who employ ten or more workers. In each of the areas for which Occupational Wage Surveys have been completed, the survey response has been well over 50 percent. It is clear that local employers also recognize the need to have accurate wage data for a variety of purposes, such as contract negotiations, economic development, and promotion. For each of 108 occupations, the wage surveys include an average wage and an average starting wage, as well as the number of firms who responded and the number of people they employ in that occupation. All data relating to specific employers is confidential. Wherever the sample size is large enough to permit, separate breakdowns for manufacturing and nonmanufacturing industries have been provided.

Occupational Wage Surveys have been completed in the Williamsport, Altoona, Johnstown, Beaver County, and Scranton/Wilkes-Barre labor market areas. Surveys are currently underway in the Erie and Reading labor market areas and in the Tri-County Service Delivery Area (Armstrong, Butler, and Indiana counties) and will be available for distribution by early 1990. Surveys are planned to begin before the end of 1989 in the Lancaster, Williamsport (second round), and Pittsburgh labor market areas. For these most recent surveys, the number of occupations covered will be increased to 135. Tentative plans for 1990 include wage surveys in the Mercer/Lawrence Service Delivery Area, and the Allentown/Bethlehem, State College, Philadelphia, and York labor market areas and second-round surveys in the Altoona, Beaver County, Scranton/Wilkes-Barre, and Johnstown labor market areas.

TABLE 20

PER CAPITA PERSONAL INCOME BY COUNTY: 1970 - 1979
(Pennsylvania And U.S. Included For Comparison)

	Dollars									
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Adams	3,739	3,922	4,250	4,646	5,137	5,523	6,321	6,915	7,601	8,447
Allegheny	4,383	4,606	5,002	5,503	6,182	6,791	7,448	8,191	9,050	10,052
Armstrong	3,213	3,428	3,847	4,200	4,755	5,358	6,000	6,649	7,150	7,971
Beaver	3,559	3,711	4,054	4,581	5,414	5,964	6,527	7,343	8,243	9,286
Bedford	2,991	3,225	3,428	3,776	4,100	4,448	4,990	5,463	6,054	6,700
Berks	4,155	4,376	4,830	5,320	5,859	6,262	6,945	7,774	8,636	9,629
Blair	3,400	3,551	3,788	4,225	4,730	5,070	5,706	6,266	6,850	7,553
Bradford	3,221	3,254	3,671	4,114	4,487	4,647	5,143	5,538	6,326	7,077
Bucks	4,190	4,429	4,852	5,319	5,910	6,302	7,022	7,781	8,744	9,858
Butler	3,699	3,914	4,143	4,628	5,198	5,641	6,113	6,792	7,567	8,526
Cambria	3,192	3,392	3,776	4,219	4,817	5,473	5,958	6,483	7,071	7,955
Cameron	3,973	3,955	4,008	4,502	5,067	5,094	5,502	6,217	6,860	7,600
Carbon	3,292	3,530	3,903	4,353	4,771	5,188	5,757	6,330	7,014	7,897
Centre	2,998	3,183	3,427	3,866	4,181	4,661	5,133	5,572	6,225	6,964
Chester	4,768	5,020	5,457	6,077	6,692	7,179	8,065	8,869	9,915	11,110
Clarion	3,332	3,492	3,761	4,262	4,792	5,454	5,953	6,591	7,325	7,922
Clearfield	3,082	3,308	3,595	4,025	4,556	5,067	5,580	6,257	6,897	7,616
Clinton	3,086	3,291	3,619	4,134	4,540	4,898	5,449	5,895	6,737	7,517
Columbia	3,413	3,561	3,964	4,436	4,880	5,101	5,566	5,990	6,649	7,384
Crawford	3,443	3,612	3,876	4,288	4,674	5,099	5,556	6,131	6,739	7,483
Cumberland	4,202	4,477	4,916	5,396	5,936	6,339	7,069	7,677	8,374	9,147
Dauphin	4,140	4,454	4,883	5,388	5,964	6,457	7,022	7,580	8,254	8,970
Delaware	4,599	4,781	5,152	5,680	6,281	6,743	7,428	8,131	9,036	10,244
Elk	3,479	3,614	3,901	4,418	4,941	5,131	5,949	6,726	7,427	8,312
Erie	3,842	4,091	4,387	4,881	5,466	5,813	6,183	6,809	7,607	8,388
Fayette	3,102	3,334	3,590	4,015	4,472	4,945	5,419	5,942	6,525	7,329
Forest	2,970	3,152	3,386	3,846	4,185	4,656	5,213	5,650	6,104	7,114
Franklin	3,717	3,819	4,271	4,775	5,268	5,665	6,099	6,639	7,411	8,123
Fulton	2,651	2,780	3,194	3,599	4,034	4,388	4,678	5,243	5,953	6,899
Greene	2,888	2,994	3,271	3,728	4,051	4,647	5,091	5,545	5,845	6,888
Huntingdon	2,837	3,023	3,230	3,629	4,056	4,370	4,805	5,298	5,938	6,585
Indiana	3,057	3,266	3,568	3,958	4,409	5,033	5,513	6,038	6,720	7,354
Jefferson	3,243	3,501	3,882	4,345	4,857	5,425	5,889	6,530	7,280	7,892
Juniata	3,205	3,376	3,737	4,373	4,747	4,968	5,491	5,927	6,641	7,313
Lackawanna	3,526	3,824	4,176	4,652	4,995	5,369	5,950	6,445	7,100	7,922
Lancaster	4,263	4,380	4,773	5,350	5,742	6,055	6,664	7,301	8,296	9,240
Lawrence	3,542	3,740	4,096	4,557	5,034	5,419	5,928	6,506	7,257	8,052
Lebanon	3,730	3,737	4,116	4,521	5,039	4,647	5,879	6,546	7,138	7,985
Lehigh	4,290	4,588	5,047	5,647	6,232	6,751	7,334	8,040	8,928	9,836
Luzerne	3,525	3,794	4,150	4,625	4,991	5,388	5,896	6,433	7,092	7,851
Lycoming	3,577	3,713	4,097	4,546	4,976	5,350	5,881	6,480	7,200	7,806
McKean	3,632	3,776	4,032	4,494	4,955	5,425	5,977	6,400	7,128	8,028
Mercer	3,617	3,801	4,169	4,673	5,198	5,575	6,098	6,795	7,635	8,415
Mifflin	3,370	3,621	3,830	3,944	4,360	4,704	5,351	5,705	6,287	6,991
Monroe	4,085	4,432	4,851	5,351	5,821	6,229	6,670	7,186	7,728	8,369
Montgomery	5,894	6,121	6,599	7,217	7,950	8,490	9,313	10,215	11,306	12,486
Montour	3,328	3,485	3,903	4,475	4,923	5,521	6,281	6,898	7,555	8,362
Northampton	4,044	4,159	4,577	5,175	5,853	6,320	6,871	7,477	8,281	9,275
Northumberland	3,370	3,526	3,820	4,267	4,614	4,964	5,412	5,892	6,403	7,007
Perry	3,261	3,341	3,615	4,051	4,412	4,780	5,300	5,747	6,405	7,210
Philadelphia	4,073	4,330	4,723	5,095	5,530	6,037	6,511	6,995	7,588	8,233
Pike	3,852	4,178	4,622	5,089	5,458	5,815	6,268	6,866	7,619	8,362
Potter	2,954	3,032	3,198	3,623	4,078	4,300	4,777	5,310	5,875	6,571
Schuylkill	3,467	3,762	4,026	4,538	4,938	5,349	5,914	6,471	6,910	7,610
Snyder	3,516	3,658	3,977	4,523	4,931	5,323	6,131	6,759	7,534	8,324
Somerset	3,098	3,306	3,609	4,075	4,669	5,337	5,920	6,555	7,192	7,971
Sullivan	2,656	2,916	3,215	3,729	4,094	4,404	4,772	5,111	5,816	6,323
Susquehanna	3,214	3,338	3,597	4,088	4,338	4,664	5,030	5,616	6,383	7,020
Tioga	2,999	3,097	3,423	3,770	4,272	4,536	4,954	5,548	6,213	6,861
Union	3,351	3,403	3,779	4,200	4,468	4,754	5,375	5,842	6,562	7,249
Venango	3,760	3,939	4,234	4,778	5,347	5,943	6,675	7,354	8,040	8,864
Warren	3,877	3,992	4,312	4,878	5,369	5,695	6,418	7,081	7,729	8,549
Washington	3,590	3,756	4,108	4,546	5,142	5,696	6,287	6,961	7,654	8,675
Wayne	3,305	3,505	3,967	4,488	4,947	5,206	5,514	6,144	6,765	7,364
Westmoreland	3,669	3,824	4,160	4,604	5,139	5,590	6,197	6,881	7,678	8,657
Wyoming	3,428	3,601	3,919	4,285	4,570	4,992	5,329	5,816	6,513	7,238
York	4,286	4,432	4,873	5,388	5,873	6,253	6,914	7,633	8,551	9,576
PENNSYLVANIA	4,042	4,253	4,627	5,106	5,640	6,101	6,700	7,338	8,109	8,995
UNITED STATES	4,051	4,296	4,665	5,182	5,648	6,073	6,651	7,294	8,136	9,033

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, April 1989.

TABLE 21

PER CAPITA PERSONAL INCOME BY COUNTY: 1980 - 1987
(Pennsylvania And U.S. Included For Comparison)

	Dollars								1987 Rank in State
	1980	1981	1982	1983	1984	1985	1986	1987	
Adams	9,291	9,992	10,430	10,828	11,841	12,718	13,350	14,211	17
Allegheny	11,096	12,349	12,965	13,323	14,057	14,941	15,629	16,607	7
Armstrong	8,881	9,525	9,809	10,593	10,930	11,858	12,214	12,[illegible]	34
Beaver	10,098	10,987	10,878	10,695	11,180	11,599	12,129	12,[illegible]	37
Bedford	7,395	8,049	8,348	8,758	9,162	9,670	10,237	10,343	63
Berks	10,677	11,723	12,325	13,299	14,295	15,083	15,774	16,803	6
Blair	8,193	8,869	9,120	9,494	10,070	10,889	11,537	12,135	44
Bradford	7,643	8,543	8,818	9,100	9,837	10,504	11,116	11,774	52
Bucks	10,971	11,995	12,655	13,574	14,540	15,839	16,856	18,030	4
Butler	9,341	10,191	10,500	10,905	11,309	12,202	12,736	13,480	23
Cambria	8,593	9,250	9,504	9,697	10,187	10,547	11,148	11,774	52
Cameron	8,376	8,959	8,418	8,852	9,432	9,883	10,958	11,814	50
Carbon	8,788	9,510	10,017	10,393	11,058	11,776	12,137	12,882	35
Centre	7,785	8,425	9,030	9,623	10,527	11,074	11,988	12,920	33
Chester	12,168	13,228	14,124	15,055	15,961	17,416	18,368	19,672	2
Clarion	8,484	9,119	9,458	9,502	10,320	10,714	11,165	11,830	49
Clearfield	8,322	9,096	9,631	9,646	10,396	10,774	11,201	11,857	48
Clinton	7,695	8,339	8,605	8,761	9,487	9,760	10,347	11,036	61
Columbia	7,991	8,745	9,203	9,638	10,236	10,924	11,588	12,411	42
Crawford	8,038	8,791	8,820	9,135	10,020	10,657	11,065	11,877	47
Cumberland	9,814	10,760	11,499	12,138	12,866	13,823	14,595	15,547	11
Dauphin	9,816	10,767	11,493	11,960	12,763	13,409	14,068	15,007	14
Delaware	11,515	12,850	13,709	14,537	15,572	16,801	17,786	19,062	3
Elk	8,981	9,927	10,651	11,224	12,242	12,406	12,505	13,284	28
Erie	9,086	9,929	10,268	10,567	11,253	12,043	12,540	13,174	29
Fayette	8,252	8,932	9,195	9,361	9,954	10,259	10,800	11,414	58
Forest	7,825	8,683	8,936	8,669	9,392	10,023	10,705	11,493	56
Franklin	8,873	9,796	10,183	10,592	11,169	11,937	12,500	13,343	27
Fulton	7,718	8,323	8,306	8,654	9,328	9,904	10,334	11,053	60
Greene	7,724	8,431	8,906	9,128	9,612	9,879	10,245	10,818	65
Huntingdon	7,022	7,657	7,977	8,179	8,773	9,155	9,719	10,378	67
Indiana	7,984	8,647	9,028	9,244	9,908	10,410	10,783	11,434	57
Jefferson	8,631	9,368	9,685	10,130	10,719	11,249	11,675	12,422	41
Juniata	7,816	8,569	9,095	9,545	10,237	10,980	11,761	12,627	39
Lackawanna	8,774	9,617	10,328	10,971	11,569	12,377	12,959	13,811	20
Lancaster	9,917	10,823	11,298	11,910	12,988	13,851	14,745	15,686	9
Lawrence	8,619	9,549	9,370	9,562	10,129	10,751	11,195	11,800	51
Lebanon	8,880	9,621	10,005	10,556	11,223	11,893	12,661	13,439	24
Lehigh	10,854	11,915	12,616	13,205	14,221	15,020	15,733	16,813	5
Luzerne	8,568	9,365	10,052	10,679	11,196	12,018	12,823	13,620	21
Lycoming	8,570	9,419	9,817	10,144	10,857	11,516	12,279	13,173	30
McKean	8,669	9,628	10,062	10,468	10,986	11,589	12,015	12,667	38
Mercer	9,330	10,391	10,310	10,265	10,892	11,356	11,536	12,115	45
Mifflin	7,591	8,227	8,358	8,685	9,395	9,882	10,554	11,182	59
Monroe	9,157	9,931	10,320	11,101	11,677	12,819	13,632	14,307	16
Montgomery	13,692	15,041	16,225	17,111	18,475	19,933	21,092	22,602	1
Montour	9,156	10,558	11,073	11,872	12,583	13,572	14,493	15,572	10
Northampton	10,274	11,312	11,656	12,177	12,939	13,754	14,407	15,334	12
Northumberland	7,817	8,596	9,077	9,519	10,073	10,568	11,239	12,014	46
Perry	7,996	8,583	9,093	9,719	10,469	11,122	11,588	12,271	43
Philadelphia	8,983	9,922	10,646	11,124	11,752	12,410	12,921	13,837	19
Pike	9,160	10,133	10,804	11,675	12,543	13,658	14,642	15,222	13
Potter	7,125	7,892	8,140	8,512	8,855	9,479	10,221	10,943	63
Schuylkill	8,409	9,150	9,741	10,348	10,950	11,487	12,184	12,965	32
Snyder	8,935	9,702	10,049	10,923	11,815	12,363	13,316	14,335	15
Somerset	8,600	9,112	9,337	9,493	10,016	10,300	10,882	11,511	55
Sullivan	7,107	7,775	7,776	8,434	9,301	9,886	10,293	10,968	62
Susquehanna	7,602	8,262	8,888	9,235	9,788	10,525	10,977	11,621	54
Tioga	7,433	8,091	8,303	8,537	9,139	9,493	9,976	10,661	66
Union	7,841	8,673	9,251	9,758	10,281	10,922	11,652	12,499	40
Venango	9,719	11,025	11,254	11,109	11,734	12,321	12,772	13,347	26
Warren	9,191	10,247	10,460	10,659	11,454	12,430	12,810	13,536	22
Washington	9,520	10,412	10,703	10,967	11,494	12,108	12,667	13,437	25
Wayne	8,191	9,164	9,553	10,290	10,677	11,612	12,233	12,998	31
Westmoreland	9,690	10,598	10,997	11,329	12,000	12,552	13,087	13,872	18
Wyoming	7,938	8,544	8,972	9,673	10,325	11,165	12,035	12,862	36
York	10,596	11,573	12,052	12,673	13,640	14,528	15,355	16,371	8
PENNSYLVANIA	9,891	10,869	11,441	11,954	12,731	13,556	14,260	15,208	—
UNITED STATES	9,919	10,949	11,482	12,100	13,116	13,899	14,609	15,484	—

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, April 1989.

TABLE 22

STATES RANKED ON PER CAPITA INCOME: 1988
Percent Change 1980 to 1988

Rank	State	Per Capita Income	% of U.S.	% Incr. 1980 to 1988	Rank	State	Per Capita Income	% of U.S.	% Incr. 1980 to 1988
1	Connecticut	23,059	140	90.4	25	Vermont	15,302	93	78.4
2	New Jersey	21,994	133	90.0	26	Georgia	15,260	93	82.8
	Dist. of Columbia	21,389	130	73.6	27	Maine	15,106	92	83.8
3	Massachusetts	20,816	126	96.2	28	Arizona	14,970	91	63.2
4	Maryland	19,487	118	80.6	29	Indiana	14,924	91	61.4
5	New Hampshire	19,434	118	98.5	30	Oregon	14,885	90	50.9
6	New York	19,305	117	80.1	31	Nebraska	14,774	90	59.3
7	Alaska	19,079	116	37.9	32	Iowa	14,662	89	53.7
8	California	18,753	114	61.6	33	Texas	14,586	88	48.9
9	Virginia	17,675	107	79.9	34	North Carolina	14,304	87	78.8
10	Delaware	17,661	107	72.3	35	Tennessee	13,873	84	72.8
11	Illinois	17,575	107	62.2	36	Wyoming	13,609	83	20.0
12	Nevada	17,511	106	53.3	37	Oklahoma	13,323	81	41.8
13	Rhode Island	16,892	102	77.5	38	South Carolina	12,926	78	70.3
14	Hawaii	16,753	102	57.8	39	Montana	12,866	78	44.2
15	Minnesota	16,674	101	65.7	40	Alabama	12,851	78	66.8
16	Florida	16,603	101	70.0	41	North Dakota	12,833	78	50.3
17	Michigan	16,552	100	62.8	42	Kentucky	12,822	78	59.8
	UNITED STATES	16,489	100	66.2	43	South Dakota	12,755	77	55.2
18	Washington	16,473	100	53.6	44	Idaho	12,665	77	47.8
19	Colorado	16,463	100	55.3	45	New Mexico	12,488	76	52.9
20	PENNSYLVANIA	16,233	98	64.1	46	Louisiana	12,292	75	41.6
21	Kansas	15,759	96	58.5	47	Arkansas	12,219	74	63.7
22	Ohio	15,536	94	59.8	48	Utah	12,193	74	53.3
23	Wisconsin	15,524	94	57.7	49	West Virginia	11,735	71	48.3
24	Missouri	15,452	94	66.2	50	Mississippi	11,116	67	60.5

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, August 1989.

TABLE 23

AVERAGE ANNUAL WAGES

Metropolitan Statistical Area	1983	1984	1985	1986	1987	1988
PENNSYLVANIA	17,161	17,931	18,611	19,358	20,408	21,488
Allentown-Bethlehem (Pa. Part)	16,777	17,745	18,384	18,826	19,709	20,977
Altoona	14,067	14,408	15,191	15,793	16,258	16,694
Beaver County	18,313	19,119	19,225	19,431	19,739	19,432
Erie	16,608	17,463	18,164	18,687	19,283	20,095
Harrisburg-Lebanon-Carlisle	16,786	17,508	17,954	18,796	19,602	20,598
Johnstown	15,161	15,992	16,091	16,322	16,877	17,502
Lancaster	15,351	16,153	16,919	17,815	18,919	20,011
Philadelphia (Pa. Part)	18,239	19,118	20,387	21,422	22,772	24,236
Pittsburgh	18,330	18,994	19,556	20,185	21,018	21,946
Reading	16,447	17,410	18,100	18,962	19,979	21,156
Scranton--Wilkes-Barre	14,234	14,708	15,368	15,946	16,857	17,616
Sharon	16,345	17,268	17,301	16,989	17,650	18,603
State College	15,174	15,902	16,617	17,264	18,275	19,144
Williamsport	15,007	15,585	16,284	16,970	17,546	18,601
York	15,660	16,456	17,209	17,775	18,737	19,785

County	1983	1984	1985	1986	1987	1988
Adams	12,444	13,001	13,359	14,110	14,676	15,531
Allegheny	18,929	19,555	20,195	20,882	21,795	22,782
Armstrong	16,190	16,603	17,229	17,609	18,341	18,601
Beaver	18,313	19,119	19,225	19,431	19,739	19,432
Bedford	12,866	13,133	13,333	14,147	14,854	15,261
Berks	16,447	17,410	18,100	18,962	19,978	21,156
Blair	14,067	14,408	15,191	15,793	16,258	16,694
Bradford	15,348	16,240	16,874	17,515	18,121	18,730
Bucks	16,583	17,392	18,171	18,978	20,217	21,651
Butler	16,974	17,565	18,027	18,654	19,485	19,947
Cambria	15,787	16,681	16,841	16,978	17,546	18,158
Cameron	14,877	15,459	15,519	15,921	16,520	17,011
Carbon	11,971	12,800	13,403	13,964	14,921	15,088
Centre	15,174	15,902	16,617	17,264	18,275	19,144
Chester	17,418	18,429	20,456	21,684	22,318	24,227
Clarion	15,515	16,449	16,433	16,530	16,589	17,030
Clearfield	14,940	15,648	15,694	15,971	16,434	16,901
Clinton	15,046	15,544	15,655	16,385	16,944	17,819
Columbia	13,456	14,257	14,957	15,184	16,010	16,794
Crawford	14,466	15,603	16,047	16,554	17,553	18,099
Cumberland	16,967	17,454	18,121	19,095	19,973	20,916
Dauphin	17,474	18,059	18,703	19,523	20,314	21,433
Delaware	17,795	18,501	19,600	20,648	21,544	22,772
Elk	16,676	18,109	18,200	18,274	19,056	19,664
Erie	16,608	17,463	18,164	18,687	19,283	20,095
Fayette	14,195	14,996	15,063	15,588	16,094	16,619
Forest	12,768	13,559	13,966	14,136	14,510	14,726
Franklin	14,323	15,304	16,246	16,432	17,528	18,035
Fulton	13,407	13,995	14,679	15,784	16,435	17,114
Greene	19,225	20,776	20,459	20,763	21,930	22,155
Huntingdon	13,708	14,264	14,661	15,277	15,636	16,129
Indiana	17,124	17,983	18,373	18,528	19,198	19,790
Jefferson	15,239	16,083	16,478	16,635	17,523	17,858
Juniata	11,281	11,753	12,604	13,114	14,182	14,454
Lackawanna	13,840	14,580	15,122	15,707	16,669	17,545
Lancaster	15,351	16,153	16,919	17,815	18,919	20,011

TABLE Z3 (Cont.)

AVERAGE ANNUAL WAGES

County	1983	1984	1985	1986	1987	1988
Lawrence	14,741	15,371	16,089	16,543	17,255	17,767
Lebanon	14,685	15,035	15,626	16,195	16,949	17,759
Lehigh	17,235	18,259	19,111	19,583	20,374	21,697
Luzerne	14,520	14,735	15,470	16,041	16,756	17,455
Lycoming	15,007	15,585	16,284	16,970	17,546	18,601
McKean	15,280	15,872	16,532	16,805	17,203	17,286
Mercer	16,345	17,268	17,301	16,989	17,650	18,603
Mifflin	14,270	15,003	15,497	16,110	17,212	17,474
Monroe	13,997	14,441	14,987	15,662	17,092	17,789
Montgomery	18,660	19,537	20,105	21,265	23,271	24,805
Montour	17,682	18,278	19,219	20,153	21,324	21,563
Northampton	16,609	17,438	17,948	18,314	19,345	20,717
Northumberland	14,023	14,710	15,019	15,700	16,685	17,558
Perry	10,714	11,072	11,577	12,342	12,716	13,396
Philadelphia	19,337	20,241	21,294	22,304	23,610	25,035
Pike	10,702	10,874	11,460	12,756	14,112	15,572
Potter	12,437	13,026	13,752	13,976	14,446	14,868
Schuylkill	12,817	13,452	13,850	14,596	15,315	16,686
Snyder	12,842	13,483	14,114	14,922	15,580	16,118
Somerset	13,571	14,315	14,247	14,711	15,268	15,928
Sullivan	11,518	11,696	12,345	13,088	13,344	14,000
Susquehanna	11,810	12,382	13,039	13,691	14,338	15,078
Tioga	13,261	13,599	14,111	14,431	15,505	15,936
Union	15,143	15,534	15,584	16,050	16,813	17,901
Venango	16,988	17,680	17,899	18,280	18,775	19,056
Warren	15,816	16,701	17,105	17,440	17,548	18,311
Washington	17,026	17,824	18,152	18,566	19,389	20,098
Wayne	12,871	13,474	13,858	14,427	15,262	16,259
Westmoreland	16,780	17,657	17,922	18,395	18,893	19,673
Wyoming	17,182	18,043	19,232	20,308	21,370	22,060
York	16,206	17,037	17,874	18,412	19,455	20,538

NOTE: Average Annual Wage Data are on a "place-of-work" basis. Average Annual Wages are derived from the ES-202 report on Pennsylvania insured employment. Annual payroll is divided by the average employment within each area under consideration.

SOURCE: Bureau of Research & Statistics, Pennsylvania Department of Labor and Industry.

TABLE 24

NATIONAL WEEKLY EARNINGS OF WAGE AND SALARY WORKERS WHO USUALLY WORK FULL-TIME
1988 ANNUAL AVERAGES
(Numbers are in thousands)

OCCUPATION	BOTH SEXES		MEN		WOMEN		WOMEN'S EARNINGS AS A PERCENTAGE OF MEN'S	WOMEN AS A PERCENT OF TOTAL EMPLOYED
	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS		
TOTAL	82,692	$385	48,049	$449	34,643	$315	70.2	41.9
Managerial/Professional Specialty occs.	21,770	552	11,968	644	9,802	465	69.8	45.0
Executive, admin. & managerial occs.	10,725	547	6,238	682	4,487	430	63.0	41.8
Administ. & officials, public admin	436	550	257	617	179	476	77.1	41.1
Financial managers	472	630	272	788	200	487	61.8	42.4
Mgrs., marketing, advertising, & PR	453	702	313	814	140	583	61.8	30.9
Management-related occups.	3,204	591	1,540	610	1,664	426	69.8	51.9
Accountants & auditors	1,114	581	536	613	578	435	71.0	51.7
Underwriters & other finan. officers	651	520	312	655	339	422	64.4	52.1
Buyers, wholesale & retail trade	172	475	90	539	82	404	75.0	47.7
Professional specialty occupations	11,045	555	5,730	651	5,315	485	74.5	48.1
Architects	97	616	80	634	17	---	---	17.5
Engineers	1,719	723	1,599	734	120	639	87.1	7.0
Chemical engineers	58	781	50	785	8	---	---	13.8
Civil engineers	192	717	182	724	10	---	---	5.2
Mechanical engineers	284	709	273	717	11	---	---	3.9
Mathematical & computer scientists	675	667	448	733	227	575	78.4	33.6
Natural scientists	356	635	275	677	81	540	79.8	22.8
Health diagnosing occups.	302	710	227	807	75	553	68.5	24.8
Physicians	254	716	190	815	64	572	70.2	25.2
Dentists	20	---	19	---	1	---	---	5.0
Health assessment & treating occups.	1,509	518	268	591	1,241	515	87.1	82.2
Registered nurses	1,075	516	79	561	996	515	91.8	92.7
Pharmacists	109	718	74	720	35	---	---	32.1
Therapists	220	497	73	517	155	489	94.6	68.0
Teachers, college & university	454	676	309	752	145	555	73.8	31.9
Teachers, except college & university	3,044	487	904	560	3,040	463	82.7	77.1
Teachers, elementary	1,264	481	198	522	1,068	476	91.2	84.5
Teachers, secondary	1,064	521	543	580	521	491	84.7	49.0
Counselors, educational & vocational	172	562	66	599	106	522	87.1	61.6
Social scientists & urban planners	237	598	136	676	101	531	78.6	42.6
Social, recreation & religious workers	851	485	476	414	375	395	95.4	44.1
Lawyers & judges	396	989	296	938	100	765	82.3	25.2
Writers, artists, entert. & athletes	1,053	483	600	559	453	388	69.4	43.0
Technical, sales, & admin. support occups.	24,931	347	9,267	472	15,664	305	64.6	62.8
Technicians & related support occups.	2,960	448	1,647	510	1,313	384	75.3	44.4
Health technologists & technicians	909	387	191	413	718	355	86.0	79.0
Clinical lab. technic. & technol.	216	417	57	484	159	399	82.4	73.6
Licensed practical nurses	299	336	17	---	282	336	---	94.3

TABLE 24 (continued)

NATIONAL WEEKLY EARNINGS OF WAGE AND SALARY WORKERS WHO USUALLY WORK FULL-TIME
1988 ANNUAL AVERAGES

OCCUPATION	BOTH SEXES		MEN		WOMEN		WOMEN'S EARNINGS AS A PERCENTAGE OF MEN'S	WOMEN AS A PERCENT OF TOTAL EMPLOYED
	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS		
Engineering & rel. technol. & technic.	854	479	695	495	159	402	81.2	18.6
Electrical & electronic technicians	293	496	250	509	47	---	---	15.5
Drafting occupations	268	463	226	479	42	---	---	15.7
Science technicians	197	415	139	434	58	377	86.9	29.4
Technicians, exc. health, eng., & sci.	1,000	529	622	605	378	451	74.5	37.8
Airplane pilots & navigators	60	811	59	823	1	---	---	1.7
Computer programmers	532	588	364	623	168	497	79.8	31.6
Legal assistants	174	421	36	---	138	413	---	79.3
Sales occupations	7,741	385	4,519	488	3,222	264	54.1	41.6
Supervisors & proprietors	2,266	419	1,478	489	788	322	65.8	34.8
Sales reps., finance & business serv.	1,476	493	860	595	616	395	66.4	41.7
Insurance sales	335	481	211	581	124	389	67.0	37.0
Real estate sales	351	512	181	613	170	446	72.8	48.4
Sales workers, retail & personal serv.	2,683	229	1,185	315	1,578	199	63.2	58.8
Sales workers, motor vehicles/boats	234	439	218	448	16	---	---	6.8
Cashiers	936	192	194	222	742	165	83.3	79.3
Administrative support, incl. clerical	14,229	318	3,101	418	11,129	305	73.0	78.2
Supervisors, admin. support	751	457	326	564	425	402	71.3	56.6
Computer equipment operators	759	342	262	415	497	311	74.9	65.5
Secretaries, stenos, & typists	3,842	310	83	315	3,779	310	98.4	98.4
Information Clerks	1,012	270	124	376	888	264	70.2	87.7
Record processing occs. exc. financial	577	311	84	370	493	305	82.4	85.4
Order clerks	155	387	27	---	128	372	---	82.6
File clerks	177	278	23	---	154	276	---	87.0
Financial records processing occups.	1,681	310	178	498	1,503	305	74.8	89.4
Bookkeepers, acct. & audit. clerks	1,322	308	123	385	1,199	304	79.0	90.7
Payroll & timekeeping clerks	149	333	15	---	134	321	---	89.9
Communications equip. operators	170	301	21	---	149	288	---	87.6
Mail & message distrib. operators	776	463	515	485	261	404	83.3	33.6
Material record., sched. & dist. clks.	1,455	342	933	374	522	303	81.0	35.9
Dispatchers	142	364	83	431	59	304	70.5	41.5
Traffic, shipping & receiving clerks	476	390	352	320	124	270	84.4	26.1
Stock & inventory clerks	456	332	281	371	175	300	80.9	38.4
Adjustors & investigators	854	344	221	472	633	319	67.6	74.1
Adjustors & invest. exc. insurance	424	331	103	491	321	311	63.3	75.7
Misc. admin. support occups., n.e.c.	2,296	298	352	380	1,944	287	75.5	84.7
General office clerks	580	297	104	374	476	288	77.0	82.1
Bank tellers	346	247	31	---	315	246	---	91.0
Data-entry keyers	301	303	26	---	275	298	---	91.4
Teachers' aides	181	224	7	---	174	222	---	96.1

TABLE 24 (continued)

NATIONAL WEEKLY EARNINGS OF WAGE AND SALARY WORKERS WHO USUALLY WORK FULL-TIME
1988 ANNUAL AVERAGES

OCCUPATION	BOTH SEXES		MEN		WOMEN		WOMEN'S EARNINGS AS A PERCENTAGE OF MEN'S	WOMEN AS A PERCENT OF TOTAL EMPLOYED
	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS		
Service occupations	8,669	245	4,317	299	4,352	208	69.6	50.2
Private household occups.	328	140	8	---	320	139	---	97.6
Protective service occups.	1,747	417	1,543	424	204	347	81.8	11.7
Firefighting & fire prevent. occups.	216	501	209	503	7	---	---	3.2
Police & detectives	750	476	650	484	100	430	88.8	13.3
Guards	601	267	517	269	84	250	92.9	14.0
Service occs. exc. protect. & household	6,594	225	2,766	257	3,828	210	81.7	58.1
Food preparation & service occups.	2,484	205	1,077	225	1,327	192	85.3	55.2
Waiters & waitresses	561	189	129	230	432	179	77.8	77.0
Cooks, except short-order	888	215	473	240	415	197	82.1	46.7
Health service occupations	1,438	236	179	277	1,259	230	83.0	87.6
Dental assistants	104	267	2	---	102	267	---	98.1
Health aides, except nursing	290	273	52	317	238	265	83.6	82.1
Nursing aides, orderlies & attend.	1,044	221	125	263	919	217	82.5	88.0
Cleaning & bldg. service occs.	1,999	259	1,313	279	686	207	74.2	34.3
Janitors & cleaners	1,397	259	1,089	272	308	213	78.3	22.0
Personal service occupations	752	232	198	267	554	222	83.1	73.7
Hairdressers & cosmetologists	268	227	27	---	241	229	---	89.9
Child care workers exc. priv. house.	157	187	17	---	140	179	---	89.2
Precision production, craft & repair occs.	11,175	430	10,249	446	926	302	67.7	8.3
Mechanics & repairers	3,850	429	3,713	441	137	292	66.9	3.6
Automobile mechanics	657	354	654	354	3	---	---	0.5
Industrial machinery repairers	530	449	519	451	11	---	---	2.1
Electrical & electron. equip. repair.	613	508	559	512	54	421	82.2	8.8
Electron. repair, comm. & indust.	137	433	129	439	8	---	---	5.8
Data processing equip. repairers	137	513	124	519	13	---	---	9.5
Telephone installers & repairers	195	573	171	582	24	---	---	12.3
Heating, air cond. & refrig. mechanics	211	414	211	414	0	---	---	0.0
Misc. mechanics & repairers	768	422	734	429	34	---	---	4.4
Office machine repairers	61	430	55	423	6	---	---	9.8
Millwrights	98	506	96	509	2	---	---	2.0
Construction trades	3,691	422	3,622	423	69	335	79.2	1.9
Construction trades, exc. supervisors	3,253	407	3,194	408	59	312	76.5	1.8
Brickmasons & stonemasons	144	448	143	448	1	---	---	0.7
Carpenters	953	381	932	383	21	---	---	2.2
Electricians	606	478	599	479	7	---	---	1.2
Painters, construction & maintenance	295	328	284	332	11	---	---	3.7
Plumbers, pipefitters, & steamfitters	409	461	407	462	2	---	---	0.5

TABLE 24 (continued)

NATIONAL WEEKLY EARNINGS OF WAGE AND SALARY WORKERS WHO USUALLY WORK FULL-TIME
1980 ANNUAL AVERAGES

OCCUPATION	BOTH SEXES		MEN		WOMEN		WOMEN'S EARNINGS AS A PERCENTAGE OF MEN'S	WOMEN AS A PERCENT OF TOTAL EMPLOYED
	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS		
Roofers	86	312	84	310	2	---	---	2.3
Construction trades, n.e.c.	180	352	178	353	2	---	---	1.1
Extractive occupations	135	503	133	504	2	---	---	1.5
Precision production occupations	3,500	427	2,781	475	719	284	59.8	20.5
Precision metalworking occups.	810	452	766	461	44	---	---	5.4
Tool & die makers	143	575	140	576	3	---	---	2.1
Machinists	456	435	435	440	21	---	---	4.6
Sheet metal workers	110	442	105	452	5	---	---	4.5
Precision woodworking occups.	71	289	62	295	9	---	---	12.7
Precision textile, apparel & furnish.	139	266	74	301	65	234	77.7	46.8
Precision workers, assorted materials	474	307	212	359	262	274	76.3	55.2
Elect. & electron. equip. assemblers	297	283	98	300	199	275	91.7	67.0
Precision food production occups.	316	295	230	353	86	211	59.8	27.2
Butchers & meatcutters	212	313	168	372	44	---	---	20.8
Bakers	82	264	51	311	31	---	---	37.8
Precision insp., testers, & rel. wkrs.	124	468	86	522	38	---	---	30.6
Plant & system operators	246	507	237	510	9	---	---	3.7
Operators, fabricators, and laborers	14,763	313	11,026	352	3,737	230	67.8	25.3
Machine operators, assemblers & inspect.	7,405	302	4,454	366	2,951	236	64.5	39.9
Metal- & plastic-working mach. opers.	438	382	361	403	77	302	74.9	17.6
Lathe & turning machine operators	61	405	59	405	2	---	---	3.3
Punching/stamp. press mach. oper.	123	349	82	383	41	---	---	33.3
Grinding/abrad./buff./polish mach.	131	362	114	378	17	---	---	13.0
Metal & plastic process. mach. oper.	174	320	130	349	44	---	---	25.3
Molding & casting machine opers.	105	297	74	329	31	---	---	29.5
Woodworking machine operators	133	268	117	273	16	---	---	12.0
Printing machine operators	446	373	339	403	107	280	69.5	24.0
Textile, apparel, & furn. mach. oper.	1,160	206	239	246	921	198	80.5	79.4
Textile sewing machine operators	669	193	73	216	596	191	88.4	89.1
Laundering/dry cleaning mach. oper.	145	214	52	242	93	199	82.2	64.1
Machine operators, assorted materials	2,497	315	1,090	361	807	251	69.5	32.3
Packaging/filling machine opers.	362	249	131	291	231	229	78.7	63.8
Mixing/blending machine opers.	95	362	86	359	9	---	---	9.5
Painting/spray painting mach. opers.	187	312	163	321	24	---	---	12.8
Furnace, kiln, oven oper. exc. food	101	433	93	453	8	---	---	7.9
Slicing & cutting machine opers.	192	290	144	323	48	---	---	25.0
Fabricators, assemb., & hand work occs.	1,700	326	1,150	369	550	240	67.2	32.4
Welders & cutters	524	397	496	400	28	---	---	5.3
Assemblers	1,025	298	567	349	458	251	71.9	44.7
Product. insp., test. samplers, weighers	835	333	414	425	421	275	64.7	50.4

TABLE 24 (continued)

NATIONAL WEEKLY EARNINGS OF WAGE AND SALARY WORKERS WHO USUALLY WORK FULL-TIME
1988 ANNUAL AVERAGES

OCCUPATION	BOTH SEXES		MEN		WOMEN		WOMEN'S EARNINGS AS A PERCENTAGE OF MEN'S	WOMEN AS A PERCENT OF TOTAL EMPLOYED
	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS	NO. OF WORKERS	MEDIAN WEEKLY EARNINGS		
Transportation & material moving occups.	3,853	389	3,636	394	217	286	72.6	5.6
Motor vehicle operators	2,682	380	2,510	386	172	281	72.8	6.4
Truck drivers, heavy	1,503	404	1,473	405	30	---	---	2.0
Truck drivers, light	584	302	542	307	42	---	---	7.2
Bus drivers	224	358	149	397	75	295	74.3	33.5
Transportation occs., exc. motor veh.	186	601	183	604	3	---	---	1.6
Rail transportation occups.	133	623	130	628	3	---	---	2.3
Water transportation occups.	53	494	53	496	0	---	---	0.0
Material moving equip. opers.	984	385	943	388	41	---	---	4.2
Crane & tower operators	83	437	81	436	2	---	---	2.4
Excavating & loading mach. opers.	92	427	91	428	1	---	---	1.1
Industrial truck/tractor equip. oper.	423	337	401	339	22	---	---	5.2
Handlers, equip. clean., help., laborers	3,505	277	2,936	287	569	237	82.6	16.2
Helpers, const. & extractive occups.	124	253	120	254	4	---	---	3.2
Construction laborers	670	308	655	309	15	---	---	2.2
Freight, stock & material handlers	1,048	277	872	287	176	226	78.7	16.8
Garage & serv. station rel. occups.	151	210	141	213	10	---	---	6.6
Hand packers & packagers	242	256	91	277	151	242	87.4	62.4
Laborers, exc. construction	1,011	288	834	300	177	247	82.3	17.5
Farming, forestry, & fishing occups.	1,383	229	1,221	234	162	201	85.9	11.7
Farm operators & managers	67	278	58	293	9	---	---	13.4
Other agricultural & rel. occups.	1,231	223	1,081	228	150	201	88.2	12.2
Farm workers	570	202	506	205	64	184	89.8	11.2
Groundskeepers & gardeners exc. farm	463	245	439	246	24	---	---	5.2
Forestry & logging occups.	70	298	66	298	4	---	---	5.7
Fishers, hunters, & trappers	16	---	16	---	0	---	---	0.0

NOTE: Individual lines will not add up to total lines, since only selected occupations have been included.
Medians and percents are not shown where the base is under 50,000. Such cases are indicated by dashes.
n.e.c. -- not elsewhere classified

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey, 1988 annual averages.

TABLE 25

SUMMARY OF PENNSYLVANIA UC COVERED EMPLOYMENT
AVERAGE UNITS, AVERAGE EMPLOYMENT, TOTAL WAGES, AND AVERAGE ANNUAL WAGE
BY INDUSTRY, CALENDAR YEAR 1988

INDUSTRY	AVERAGE QUARTERLY UNITS	AVERAGE MONTHLY EMPLOYMENT	PERCENT CHANGE FROM 1987	TOTAL WAGES (THOUSANDS)	PERCENT CHANGE FROM 1987	AVERAGE ANNUAL WAGE	PERCENT CHANGE FROM 1987
TOTAL-ALL INDUSTRIES	237,484	4,772,856	2.6	$101,779,436	8.2	$21,325	5.4
(Excluding Federal Government)							
AGRICULTURE,FORESTRY,AND FISHING	4,028	35,917	5.0	512,071	11.1	14,257	5.8
01-AGRICULTURAL PRODUCTION-CROPS	471	11,802	2.9	153,002	6.9	12,964	3.8
02-AGRICULTURAL PRODUCTION-LIVESTOCK	174	3,347	-2.9	46,015	2.4	13,748	5.5
07-AGRICULTURAL SERVICES	3,308	20,370	7.7	307,494	14.8	15,095	6.6
08-FORESTRY	52	282	6.4	3,600	7.9	12,766	1.4
09-FISHING, HUNTING AND TRAPPING	23	115	13.9	1,960	29.2	17,045	13.5
MINING	1,142	28,695	-7.0	914,086	-4.0	31,855	3.2
10-METAL MINING	*	*		*		*	
12-COAL MINING	566	19,728	N/A	660,904	N/A	33,501	N/A
13-OIL & GAS EXTRACTION	*	*		*		*	
14-NONMETALLIC MINERALS, EXCEPT FUELS	193	5,145	2.8	145,248	8.8	28,231	5.8
CONSTRUCTION	27,982	229,370	5.1	5,850,230	11.6	25,506	6.1
15-GENERAL BUILDING CONTRACTORS	10,067	65,252	6.7	1,542,534	15.9	23,640	8.6
16-HEAVY CONSTRUCTION, EX BUILDING	1,101	35,617	N/A	1,140,323	N/A	32,016	N/A
17-SPECIAL TRADE CONTRACTORS	16,814	128,502	N/A	3,167,373	N/A	24,648	N/A
MANUFACTURING	17,353	1,061,227	1.4	27,938,364	6.8	26,326	5.4
20-FOOD & KINDRED PRODUCTS	1,219	91,419	0.6	2,121,495	5.8	23,206	5.2
21-TOBACCO PRODUCTS	17	1,178	0.2	19,981	-3.5	16,962	-3.6
22-TEXTILE MILL PRODUCTS	435	31,032	0.2	557,832	5.2	17,976	5.0
23-APPAREL & OTHER TEXTILE PRODUCTS	1,345	82,500	-5.6	1,078,377	0.3	13,071	6.2
24-LUMBER & WOOD PRODUCTS	1,509	31,908	N/A	611,238	N/A	19,156	N/A
25-FURNITURE & FIXTURES	475	21,953	2.9	452,008	7.0	20,590	4.1
26-PAPER & ALLIED PRODUCTS	390	41,834	N/A	1,233,020	N/A	29,474	N/A
27-PRINTING & PUBLISHING	2,395	83,106	2.7	1,947,752	8.5	23,437	5.7
28-CHEMICALS & ALLIED PRODUCTS	579	60,099	2.1	2,322,286	14.1	38,641	11.8
29-PETROLEUM & COAL PRODUCTS	140	10,768	0.2	427,664	0.7	39,716	0.5
30-RUBBER & MISC PLASTICS PRODUCTS	697	40,823	N/A	914,859	N/A	22,410	N/A
31-LEATHER & LEATHER PRODUCTS	111	10,232	0.1	155,255	5.1	15,173	5.0
32-STONE, CLAY & GLASS PRODUCTS	784	47,668	N/A	1,333,156	N/A	27,968	N/A
33-PRIMARY METAL INDUSTRIES	556	91,512	4.4	3,026,153	9.1	33,068	4.5
34-FABRICATED METAL PRODUCTS	1,805	93,619	N/A	2,401,935	N/A	25,656	N/A
35-INDUSTRIAL MACHINERY & EQUIPMENT	2,687	109,232	N/A	3,283,174	N/A	30,057	N/A
36-ELECTRONIC & OTHER ELECTRIC EQUIPMENT	796	89,231	N/A	2,400,553	N/A	26,903	N/A
37-TRANSPORTATION EQUIPMENT	356	62,271	N/A	1,990,422	N/A	31,964	N/A

N/A - SEE PUBLISHING NOTE AT BEGINNING OF PUBLICATION.

* DATA WHICH MIGHT BE IDENTIFIED WITH AN INDIVIDUAL EMPLOYER AND/OR DATA INVOLVING FEWER THAN TWENTY-FIVE EMPLOYES ARE NOT PUBLISHED.

NOTE - UNITS, EMPLOYMENT AND WAGES MAY NOT ADD DUE TO ROUNDING.

TABLE 25 (cont.)

SUMMARY OF PENNSYLVANIA UC COVERED EMPLOYMENT
AVERAGE UNITS, AVERAGE EMPLOYMENT, TOTAL WAGES, AND AVERAGE ANNUAL WAGE
BY INDUSTRY, CALENDAR YEAR 1988

INDUSTRY	AVERAGE QUARTERLY UNITS	AVERAGE MONTHLY EMPLOYMENT	PERCENT CHANGE FROM 1987	TOTAL WAGES (THOUSANDS)	PERCENT CHANGE FROM 1987	AVERAGE ANNUAL WAGE	PERCENT CHANGE FROM 1987
38-INSTRUMENTS & RELATED PRODUCTS	542	39,798	N/A	1,138,168	N/A	28,599	N/A
39-MISC MANUFACTURING INDUSTRIES	515	21,047	2.0	523,036	8.2	24,851	6.1
TRANSPORTATION, AND PUBLIC UTILITIES	8,944	233,864	3.3	6,544,194	6.2	27,983	2.8
40-RAILROAD TRANSPORTATION	*	*		*		*	
41-LOCAL & INTERURBAN PASSENGER TRANSIT	1,281	22,754	3.5	240,855	7.9	10,585	4.2
42-TRUCKING & WAREHOUSING	4,560	73,292	5.6	1,762,294	9.2	24,045	3.4
44-WATER TRANSPORTATION	132	4,609	-1.6	171,068	0.3	37,116	1.9
45-TRANSPORTATION BY AIR	236	16,044	8.6	466,169	11.8	29,056	3.0
46-PIPELINES, EXCEPT NATURAL GAS	*	*		*		*	
47-TRANSPORTATION SERVICES	1,256	11,443	7.2	233,884	16.5	20,439	8.7
48-COMMUNICATION	810	49,942	0.9	1,587,079	4.1	31,778	3.1
49-ELECTRIC, GAS, & SANITARY SVCS	648	55,055	0.5	2,053,273	3.5	37,295	2.9
WHOLESALE TRADE	21,413	272,149	3.1	7,383,722	10.8	27,131	7.5
50-WHOLESALE TRADE-DURABLE GOODS	14,552	171,256	N/A	4,859,635	N/A	28,376	N/A
51-WHOLESALE TRADE-NONDURABLE GOODS	6,861	100,893	1.5	2,524,087	9.0	25,017	7.5
RETAIL TRADE	54,946	881,000	2.7	9,917,353	7.8	11,257	5.0
52-BUILDING MATERIALS & GARDEN SUPPLIES	2,804	32,415	6.1	530,534	11.1	16,367	4.7
53-GENERAL MERCHANDISE STORES	1,184	127,249	1.1	1,424,515	2.3	11,195	1.2
54-FOOD STORES	6,265	159,282	4.6	1,674,786	8.0	10,515	3.2
55-AUTOMOTIVE DEALERS & SERVICE STATIONS	7,516	93,351	2.5	1,738,596	8.5	18,624	5.9
56-APPAREL & ACCESSORY STORES	4,522	51,962	2.8	541,216	9.4	10,416	6.4
57-FURNITURE & HOMEFURNISHINGS STORES	3,960	34,517	0.7	579,743	9.1	16,796	8.4
58-EATING & DRINKING PLACES	16,952	263,277	1.6	1,899,110	8.7	7,213	7.0
59-MISC RETAIL	11,744	118,948	N/A	1,528,853	N/A	12,853	N/A
FINANCE, INSURANCE, AND REAL ESTATE	16,085	294,020	1.0	7,524,736	8.9	25,593	7.9
60-DEPOSITORY INSTITUTIONS	1,837	108,841	N/A	2,307,269	N/A	21,199	N/A
61-NONDEPOSITORY INSTITUTIONS	757	11,540	N/A	340,514	N/A	29,507	N/A
62-SECURITY & COMMODITY BROKERS	897	14,710	4.8	803,894	8.7	54,649	3.7
63-INSURANCE CARRIERS	1,307	84,559	1.1	2,216,392	6.8	26,211	5.6
64-INSURANCE AGENTS, BROKERS & SVC	4,525	26,349	N/A	720,460	N/A	27,343	N/A
65-REAL ESTATE	6,239	40,042	N/A	801,892	N/A	20,026	N/A
67-HOLDING & OTHER INVESTMENT OFFICES	524	7,978	-9.4	334,315	13.7	41,905	25.5
SERVICES	79,931	1,216,363	4.5	23,753,026	10.4	19,528	5.7
70-HOTELS & OTHER LODGING PLACES	1,743	53,119	0.5	546,565	6.4	10,289	5.8
72-PERSONAL SERVICES	7,942	48,363	N/A	526,854	N/A	10,894	N/A
73-BUSINESS SERVICES	9,800	194,304	N/A	3,178,781	N/A	16,360	N/A

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NOTE - UNITS, EMPLOYMENT AND WAGES MAY NOT ADD DUE TO ROUNDING.

TABLE 25 (cont.)

SUMMARY OF PENNSYLVANIA UC COVERED EMPLOYMENT
AVERAGE UNITS, AVERAGE EMPLOYMENT, TOTAL WAGES, AND AVERAGE ANNUAL WAGE
BY INDUSTRY, CALENDAR YEAR 1988

INDUSTRY	AVERAGE QUARTERLY UNITS	AVERAGE MONTHLY EMPLOYMENT	PERCENT CHANGE FROM 1987	TOTAL WAGES (THOUSANDS)	PERCENT CHANGE FROM 1987	AVERAGE ANNUAL WAGE	PERCENT CHANGE FROM 1987
75-AUTO REPAIR, SERVICES & PARKING	6,832	37,273	3.6	617,167	9.3	16,558	5.5
76-MISC REPAIR SERVICES	2,535	14,426	3.3	311,367	7.8	21,584	4.3
78-MOTION PICTURES	979	9,546	N/A	97,448	N/A	10,208	N/A
79-AMUSEMENT & RECREATION SERVICES	3,204	44,501	N/A	557,228	N/A	12,522	N/A
80-HEALTH SERVICES	19,231	432,375	3.7	9,799,334	8.9	22,664	5.0
81-LEGAL SERVICES	5,089	38,262	6.5	1,274,460	17.4	33,309	10.3
82-EDUCATIONAL SERVICES	1,772	105,477	4.0	2,161,663	9.0	20,494	4.8
83-SOCIAL SERVICES	3,633	87,622	8.2	1,068,619	13.2	12,196	4.7
84-MUSEUMS, BOTANICAL, ZOOLOGICAL GRDNS	86	2,423	N/A	36,127	N/A	14,910	N/A
86-MEMBERSHIP ORGANIZATIONS	6,055	45,387	3.8	501,092	8.9	11,040	4.9
87-ENGINEERING & MANAGEMENT SERVICES	7,574	95,515	N/A	2,936,500	N/A	30,744	N/A
88-PRIVATE HOUSEHOLDS	3,142	5,297	0.0	47,395	8.2	8,947	8.2
89-MISC SERVICES	317	2,473	N/A	92,426	N/A	37,374	N/A
LOCAL GOVERNMENT	4,296	389,428	1.0	8,329,336	6.2	21,389	5.1
STATE GOVERNMENT	1,366	130,824	-0.3	3,112,316	4.2	23,790	4.5
FEDERAL GOVERNMENT (EXCLUDED FROM TOTAL)	2,394	142,148	0.8	3,835,717	3.2	26,984	2.4
* TOTAL - UNPUBLISHED 2-DIGIT INDUSTRIES	406	4,546		137,506			

N/A - SEE PUBLISHING NOTE AT BEGINNING OF PUBLICATION.

* DATA WHICH MIGHT BE IDENTIFIED WITH AN INDIVIDUAL EMPLOYER AND/OR DATA INVOLVING FEWER THAN TWENTY-FIVE EMPLOYES ARE NOT PUBLISHED.

NOTE - UNITS, EMPLOYMENT AND WAGES MAY NOT ADD DUE TO ROUNDING.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 26

AVERAGE EARNINGS AND HOURS OF MANUFACTURING PRODUCTION WORKERS IN MAJOR PENNSYLVANIA LABOR MARKET AREAS

AVERAGE WEEKLY EARNINGS

MAJOR LABOR MARKET AREA	1984	1985	1986	1987	1988
PENNSYLVANIA	373.06	381.84	391.55	408.18	421.07
Allentown-Bethlehem MSA	385.53	402.98	396.15	419.09	420.65
Altoona MSA	319.12	325.75	332.13	340.42	355.12
Beaver County PMSA	472.56	459.29	478.88	458.99	452.83
Erie MSA	415.95	423.78	427.80	431.76	450.64
Harrisburg-Lebanon-Carlisle MSA	356.71	358.27	368.15	373.07	380.09
Johnstown MSA	311.36	311.08	313.74	328.83	336.20
Lancaster MSA	346.73	368.68	379.89	390.91	409.05
Philadelphia MSA	388.90	401.80	420.33	441.60	455.31
Pittsburgh PMSA	441.98	448.51	456.08	468.44	475.59
Reading MSA	382.86	393.96	401.36	419.42	438.86
Scranton--Wilkes-Barre MSA	295.66	312.09	329.18	340.38	347.77
Sharon MSA	N/A	N/A	458.28	471.09	483.94
State College MSA	N/A	N/A	313.97	321.44	325.65
Williamsport MSA	322.29	337.39	344.80	354.41	368.18
York MSA	356.90	364.42	380.56	401.29	416.08

AVERAGE WEEKLY HOURS

MAJOR LABOR MARKET AREA	1984	1985	1986	1987	1988
PENNSYLVANIA	40.2	39.9	40.2	40.9	41.0
Allentown-Bethlehem MSA	39.1	39.2	38.8	39.8	40.1
Altoona MSA	39.3	39.2	38.8	39.4	40.4
Beaver County PMSA	41.2	39.8	41.0	41.5	42.4
Erie MSA	42.1	42.0	41.9	42.0	43.0
Harrisburg-Lebanon-Carlisle MSA	39.9	39.5	39.8	39.9	39.8
Johnstown MSA	37.2	37.3	37.8	39.1	39.6
Lancaster MSA	39.9	39.9	40.2	40.3	40.5
Philadelphia MSA	40.3	40.1	40.3	40.7	40.4
Pittsburgh PMSA	41.0	40.7	41.2	41.9	42.2
Reading MSA	40.6	40.2	40.5	41.2	40.9
Scranton--Wilkes-Barre MSA	38.1	38.2	38.5	38.9	38.9
Sharon MSA	N/A	N/A	40.2	41.8	42.6
State College MSA	N/A	N/A	39.1	39.2	39.0
Williamsport MSA	39.4	39.6	40.0	41.5	41.0
York MSA	41.5	40.9	41.5	42.6	42.5

AVERAGE HOURLY EARNINGS

MAJOR LABOR MARKET AREA	1984	1985	1986	1987	1988
PENNSYLVANIA	9.28	9.57	9.74	9.98	10.27
Allentown-Bethlehem MSA	9.86	10.28	10.21	10.53	10.49
Altoona MSA	8.12	8.31	8.56	8.64	8.79
Beaver County PMSA	11.47	11.54	11.68	11.06	10.68
Erie MSA	9.88	10.09	10.21	10.28	10.48
Harrisburg-Lebanon-Carlisle MSA	8.94	9.07	9.25	9.35	9.55
Johnstown MSA	8.37	8.34	8.30	8.41	8.49
Lancaster MSA	8.69	9.24	9.45	9.70	10.10
Philadelphia MSA	9.65	10.02	10.43	10.85	11.27
Pittsburgh PMSA	10.78	11.02	11.07	11.18	11.27
Reading MSA	9.43	9.80	9.91	10.18	10.73
Scranton--Wilkes-Barre MSA	7.76	8.17	8.55	8.75	8.94
Sharon MSA	N/A	N/A	11.40	11.27	11.36
State College MSA	N/A	N/A	8.03	8.20	8.35
Williamsport MSA	8.18	8.52	8.62	8.54	8.98
York MSA	8.60	8.91	9.17	9.42	9.79

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

SECTION IV

OCCUPATIONAL TRENDS AND OUTLOOK: 1984-1995

Changes anticipated in Pennsylvania's occupational structure over the 1984 to 1995 period are graphically depicted in the pie chart on graph 3. For greater occupational detail, the reader is referred to Table 32 at the end of Section IV.

Many of the past trends in the occupational composition of total employment are expected to continue through 1995. Employment continues to expand more rapidly in the service and white collar occupations as the number of blue collar jobs decline. One departure from past trends is the expected slowdown in the rate of growth for many occupations in the clerical group. The automation of clerical tasks will slow the growth of many detailed occupations and cause some to decline. As a result, the share of total employment accounted for by the administrative support group is projected to decline from 17.2 percent in 1984 to 16.8 percent in 1995.

Labor force separations (deaths, retirements, or withdrawals from the labor force for other reasons) will create the majority of the total projected job openings. About 84 percent of the 250,400 projected annual average job openings will result from labor force separations. Therefore, a large volume occupation with little or no growth can generate more total job openings than a relatively small volume occupation with rapid growth. For instance, the high volume-no growth occupation of packaging and filling machine operator has more annual average job openings than the lower volume-high growth occupation of paralegal personnel.

Over the 1984-95 period, the two major occupational groups having the largest proportion of workers normally requiring a college education or specialized post-secondary training are expected to increase faster than the average for all occupations. The first of these groups, managerial and management related occupations, is projected to increase by 58,800 jobs or 12.8 percent. The demand for salaried managers is expected to increase as firms increasingly depend on trained management specialists. Professional, technical and related occupations are projected to increase by 135,700 jobs or 16.7 percent. Computer related occupations and certain health specialty occupations are expected to surge. By 1995, employment in the major group is expected to comprise 17.1 percent of total state employment, an increase from the 16.0 percent share in 1984.

The number of marketing and sales occupations is projected to increase by 17.1 percent, or about twice as fast as the increase for all occupations, from 1984 to 1995. About 39,400 openings are projected annually for this major group. Retail salespersons and cashiers account for 46.0 percent of the occupations in the group.

Administrative support and clerical workers is the largest of the major occupational groups. Every major industry sector employs large numbers of clerical workers. Through the 1984-95 period this group is projected to increase by 5.8 percent, a rate lower than the average for all occupations. In spite of the slowing growth rate, 35,400 annual average job openings are projected for this group through 1995. Significant numbers of new jobs are

expected to be added in several clerical fields, including secretaries (12,200 jobs); general office clerks (9,500 jobs); receptionists and information clerks (4,200 jobs); and tellers (3,600 jobs).

Service occupations are projected to grow at a significantly higher rate (20.3 percent) than the average for all jobs (8.7 percent) through 1995. This group is expected to account for more job growth than any other group (up 158,200) and increase its share of total employment from 15.3 to 16.9 percent by 1995. Food service workers account for 41 percent of all service occupations and are expected to add 74,900 new jobs during the 1984-95 period. Among the occupations projected to add large numbers of new jobs are waiters and waitresses (23,100); food preparation workers (10,200); and restaurant cooks (6,900). Cleaning and building service workers are comprised almost entirely of janitors and cleaners and are projected to increase by 15.8 percent from 1984-1995. Health service occupations are projected to increase by 29.7 percent during the projection period, with the high volume and growth occupation, nursing aides and orderlies, accounting for 67.0 percent of the job growth. Personal service occupations are projected to add 16,200 new jobs, or 21.7 percent during the projection period. Occupations growing at a faster rate include cosmetologists and related workers, social welfare service aides, and flight attendants. The number of protective service occupations is projected to grow by 13.7 percent. Guards are expected to increase considerably faster (24.3 percent) and account for 71.0 percent of the new jobs in protective services.

Precision production, craft and repair occupations are projected to increase by 2.0 percent from 1984 to 1995, which is considerably slower than the average for all occupations. Employment in this group is closely related to the construction and manufacturing industries in which they are concentrated; construction is projected to have average growth and manufacturing employment is projected to decline. Carpenters are, by far, the largest of the construction trades and are projected to grow by 16.8 percent between 1984 and 1995. Mechanics, installers and repairers are projected to increase by 7.5 percent and add 17,200 new jobs by 1995. Due to the projected decline in manufacturing employment, precision production jobs are expected to decline by 8.2 percent during the 1984-95 period. Despite the decline, 4,900 annual average job openings are projected for this group.

Operators, fabricators and laborers are projected to decline by 7.2 percent from 1984 to 1995. Many occupations in this group, including machine operators and assemblers are expected to be affected by new technologies, such as computer-aided manufacturing and robotics. Technological change is expected to have less of an impact on transportation occupations, such as truck drivers, bus drivers, and airplane pilots. Truck drivers are projected to increase by 10,800 jobs, or 9.4 percent from 1984 to 1995 and remain the largest occupation in the operators group.

Agriculture, forestry and fishing workers are expected to continue to decline because of productivity growth in agriculture. However, the decline is not expected to be as great as in the recent past.

Table 27 presents Pennsylvania's top 27 occupations based on projected annual average job openings during the 1984-1995 period, which should not to be confused with Pennsylvania's fastest growing occupations, which include many of those associated with advanced technology. These occupations are the large volume jobs, which are found in most industries and, therefore, traditionally provide many of the State's job opportunities.

Table 28 gives a list of the 27 occupations with the highest projected percentage of growth between 1984 and 1995. A few occupations listed in this table are duplicated in Table 27 but the occupations with the fastest rate of growth differ from those with large numbers of openings in at least one important respect: most of the fast-growing occupations require at least some education beyond the high school level. Many of them are in health services and computer related fields, reflecting the continued growth of the health services and the high-technology industries. Those occupations that require little education will be principally in the low paying service fields.

The most rapidly declining occupations in Pennsylvania are outlined on Table 29. Most of these occupations are concentrated in industries such as manufacturing and railroad transportation that have experienced declines in recent years and are expected to continue. Also some occupations are expected to be adversely affected by technological change.

Tables 30 and 31 list occupations with the greatest degree of potential employability in Pennsylvania during the period 1984-1995, based on projected employment in the occupation, volume and rate of projected job growth, and the annual average number of job openings produced in the field by either turnover or job creation. The 100 occupations on Table 31 account for two-thirds of total projected employment and nearly three-fourths of all annual average job openings during the ten-year period. The occupations are ranked in terms of their employment probability, i.e., their ability to generate hiring potential during the 1980s. On this basis, registered nurse is the occupation offering the greatest potential followed by cashier, nursing aide/orderly/attendant, waiter and waitress, computer programmer, guard, hairdresser/stylist/cosmetologist, restaurant cook, accountant and auditor, and food preparation worker. It is obvious that most of these jobs will be in such nonmanufacturing industries as health services, retail trade, eating and drinking places, and business services. This is not surprising in view of the growth trend among industries in recent years or the high turnover in such occupations as cashier, fast food worker, waiter/waitress, or security guard. This occupational listing is undoubtedly similar to those of most areas of the United States. It does not mean that high-paying jobs with advancement potential will be in short supply. Occupational growth is closely related to the demands of society, and our society needs nurses and cashiers in greater numbers than it needs chemists or lawyers. The full list of 100 occupations contains many highly-paid professional and skilled crafts areas, such as civil engineer, computer programmer, electrician, physician/surgeon, systems analyst, teacher, and operating engineer. Nevertheless, the bulk of the jobs that will be generated will be in the clerical, sales, and service categories.

Rounding out this analysis of occupational growth trends in the period 1984-1995 is a consideration of actual numbers of jobs in particular occupational groups as given in Table 32. White-collar occupations will account for 54.7 percent of all jobs in Pennsylvania in 1995, compared with 26.8 percent in blue-collar occupations, 16.9 percent in service occupations, and 1.6 percent in farming, forestry and fishing occupations.

TABLE 27

Occupations With Most Openings in Pennsylvania: 1984-1995
(Annual Average Job Openings)

Occupations	Annual Average Openings	Due to Growth	Due to Labor Force Separations 1/
1. Janitors & Cleaners, Inc. Maids	13,122	1,930	11,192
2. Salespersons, Retail	11,661	1,766	9,895
3. General Office Clerks	5,741	863	4,878
4. Secretaries	5,729	1,106	4,623
5. Registered Nurses	5,288	2,610	2,658
6. Cashiers	5,007	2,276	2,731
7. Guards	4,843	866	3,977
8. Stock Clerks, Sales Floor	4,821	924	3,897
9. Truck Drivers	4,499	983	3,516
10. Waiters & Waitresses	4,427	2,096	2,331
11. Bookkeeping Acctg., & Aud. Clerks	4,422	236	4,186
12. Nursing Aides & Orderlies	3,485	1,451	2,034
13. Food Preparation Workers	3,002	927	2,075
14. Blue Collar Worker Supervisors	2,599	-669	3,268
15. Maint. Repairers, Genl. Util.	2,426	472	1,954
16. Accountants & Auditors	2,373	849	1,524
17. Physicians & Surgeons	2,263	453	1,810
18. College & University Fac.	2,212	443	1,769
18. Cleaners & Serv., Pvt. Household	2,212	-73	2,285
20. Teachers, Preschool & Elementary	2,140	649	1,491
21. Carpenters	2,082	630	1,452
22. Farmers	2,038	-300	2,338
23. Bartenders	2,025	514	1,511
24. Teachers, Secondary School	1,924	494	1,430
25. Gardeners & Groundskeepers	1,898	398	1,500
26. Hairdressers, Hairstylists, Cosmetologists	1,878	733	1,145
27. Lawyers	1,849	415	1,434

The 27 listed occupations comprise 42.3 percent of the total annual job openings.

1/ Due to deaths, retirements, and other separations from the labor force. Does not include transfers out of occupations.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 28

Fastest Growing Occupations in Pennsylvania: 1984-1995 1/

Occupations	Estimated 1984 Employment	Projected 1995 Employment	Percent Increase
1. Paralegal Personnel	3,328	5,604	68.5
2. Medical Assistants	5,166	8,271	60.1
3. Computer Programmers	21,214	33,237	56.7
4. Data Processing Equip. Repra.	3,128	4,751	51.9
5. Computer Systems Analysts, EDP	15,693	22,488	43.2
6. Physician Assistants	1,899	2,708	42.6
7. Physical Therapists	2,741	3,845	40.3
8. Social Welfare Service Aides	9,421	13,153	39.6
9. Peripheral EDP Equip. Ops.	2,402	3,289	36.9
10. Dental Hygienists	3,248	4,433	36.6
11. Securities & Fin. Servs. Sales	11,588	15,828	36.5
12. Medical Records Techn. & Tech.	1,761	2,394	35.9
12. Dental Assistants	7,350	9,985	35.9
14. Detect. & Invest., exc. public	2,025	2,706	33.6

Occupations	Estimated 1984 Employment	Projected 1995 Employment	Percent Increase
14. Housekeepers, Institutional	3,356	4,483	33.6
14. Registered Nurses	85,553	114,267	33.6
17. Brokerage Clerks	1,709	2,280	33.4
18. Empl. Interviewers, Emp. Sec.	1,907	2,513	31.8
19. Dental Lab Techns., Prec.	1,911	2,501	30.9
20. Cooks, Restaurant	22,557	29,431	30.5
21. Hairdressers, Hairstylists, Cosmetologists	26,912	34,976	30.0
22. Hosts & Hostesses, Rest./Lounge	7,510	9,755	29.9
23. Nursing Aides & Orderlies	53,655	69,611	29.7
24. Air Craft Pilots & Flight Engineers	1,561	2,019	29.3
25. Opticians, Dispensing & Measuring	1,954	2,524	29.2
25. Travel Agents	3,445	4,452	29.2
27. Dentists	6,902	8,909	29.1

1/ Includes only those occupations with estimated 1984 employment of at least 1,500 and percent increase greater than 29.0 percent.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 29

Most Rapidly Declining Occupations in Pennsylvania: 1984-1995 1/

Occupations	Estimated 1984 Employment	Projected 1995 Employment	Percent Decline
1. Rolling Mach. Set & Set-up Ops.	1,882	1,029	45.3
2. Station Installers & Repairers	2,609	1,556	40.4
3. Stenographers	11,382	6,876	39.6
4. Ext. & Draw. Mach. Setters & Set-up Ops.	1,883	1,147	39.1
5. Furnace, Kiln, or Kettle Ops.	1,759	1,081	38.5
6. Shoe Sewing Mach. Ops. & Tenders	3,131	1,935	38.2
7. Shear Mach., Setters & Set-up Ops.	1,675	1,093	34.7
8. RR Brake, Signal & Switch Ops.	2,318	1,540	33.6
9. Lathe Mach. Tool Setters & Set-up Ops.	7,202	4,838	32.8
10. Drill Mach. Tool Setters & Set-up Ops.	4,870	3,278	32.7
11. Portable Machine Cutters	1,564	1,058	32.4
12. Grinding Mach. Setters & Set-up Ops.	5,822	4,053	31.6
13. Milling Mach. Setters & Set-up Ops.	2,446	1,684	31.2
14. Machine Forming Ops. & Tenders	11,683	8,066	31.0
15. Mach. Tool Cutting Ops. & Tenders	8,628	5,980	30.7
16. Furnace Operators & Tenders	2,011	1,411	29.8
17. Sewing Mach. Ops., Garment	67,730	47,733	29.5
18. Rail-Track Laying & Maint. Equip. Ops.	2,398	1,698	29.2
19. RR Conductors & Yardmasters	2,434	1,752	28.0
20. Punch Mach. Setters & Set-up Ops.	3,988	2,884	27.6
21. Press Mach. Setters & Set-up Ops.	3,920	2,855	27.2
22. Pressers, Hand	2,487	1,829	26.5
23. Hoist, Winch & Crane Ops.	7,725	5,697	26.3
23. Foundry Mold & Core Makers	2,554	1,883	26.3
25. Cutters & Trimmers, Hand	5,962	3,897	25.9
26. Textile Mach. Ops. & Tenders	8,800	6,548	25.6

1/ Includes only those occupations with estimated 1984 employment of at least 1,500 and percent decline greater than 25.0 percent.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

GRAPH 3

PENNSYLVANIA
PERCENT DISTRIBUTION OF TOTAL EMPLOYMENT
BY MAJOR OCCUPATIONAL GROUP

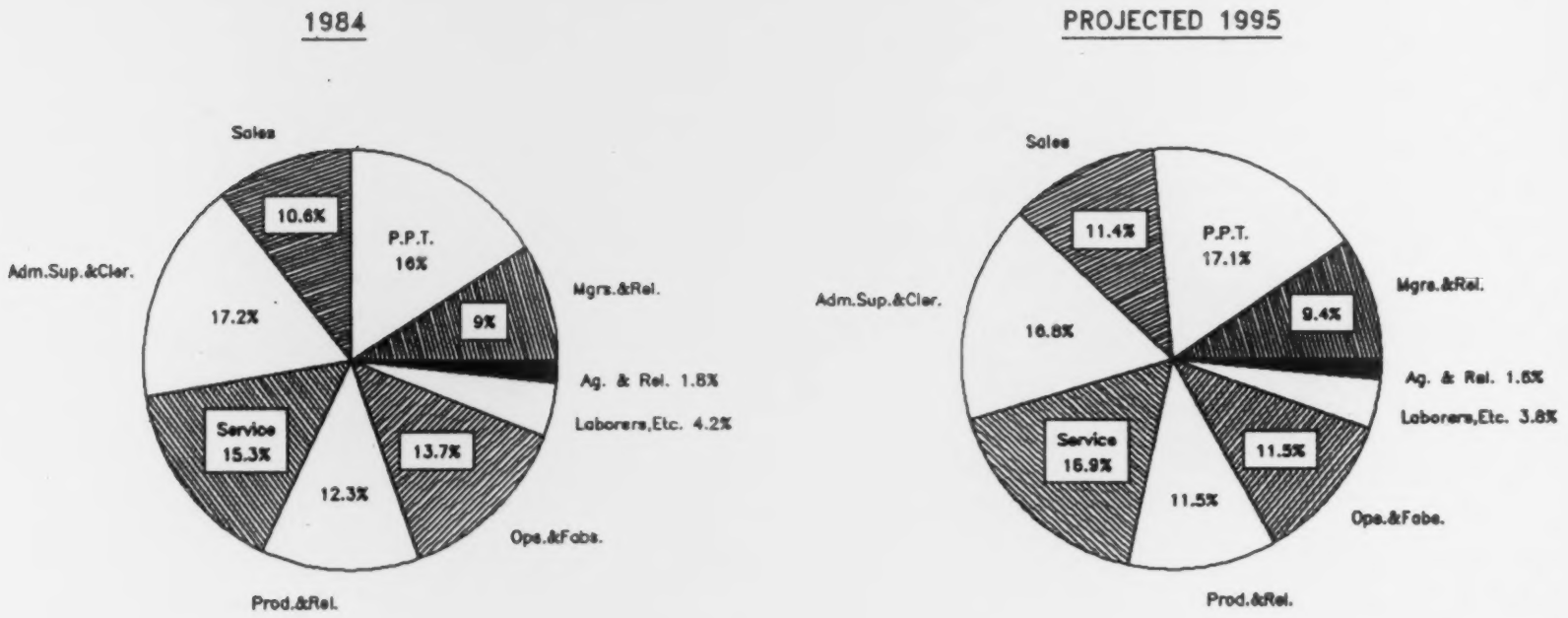

TABLE 30
OCCUPATIONAL EMPLOYMENT PROBABILITY ASSESSMENT REPORT
RELATIVE RANKING AND GRADE
OF
TOP 25 OCCUPATIONS

The following list of 25 occupations have a higher degree of potential employability based on a combination of the following factors: Projected Employment (1995); Volume of Growth in number of new jobs; Rate of Employment Growth; and number of Annual Average Job Openings.

OCCUPATION	SOC CODE 1/	ESTIMATED 1984 EMP.	PROJECTED 1995 EMP.	VOLUME OF GROWTH	RATE OF GROWTH	ANN. AVG. JOB OPENINGS	RANK 2/
Registered Nurses	2900	85,553	114,267	28,714	33.6	5,268	1
Cashiers	4364	87,894	112,928	25,034	28.5	5,007	2
Nursing Aides, Orderlies/Attendants	5236	53,655	69,611	15,956	29.7	3,485	3
Waiters and Waitresses	5213	84,006	107,057	23,051	27.4	4,427	4
Computer Programmers	3971	21,214	33,237	12,023	56.7	1,248	5
Guards	5144	39,235	48,762	9,527	24.3	4,843	6
Hairdresser/Stylist/Cosmetologist	5253	26,912	34,976	8,064	30.0	1,878	7
Cooks, Restaurant	5214	22,557	29,431	6,874	30.5	1,790	8
Accountants and Auditors	1412	41,105	50,445	9,340	22.7	2,373	9
Food Preparation Workers	5217	47,296	57,488	10,192	21.5	3,002	10
Computer Systems Analysts, EDP	1712	15,693	22,468	6,775	43.2	835	11
Janitor and Cleaner, Industrial Maint	5244	133,241	154,476	21,235	15.9	13,122	12
Bartenders	5212	23,678	29,333	5,655	23.9	2,025	12
Auto & Motorcycle Mechanics	6111	33,631	40,959	7,328	21.8	1,680	14
All Other Sales & Related Workers	4400	173,215	197,527	24,312	14.0	13,425	15
All Other Service Workers	5200	42,639	50,207	7,568	17.7	4,834	15
Securities & Finance Svcs Sales Workers	4124	11,598	15,828	4,230	36.5	1,098	17
All Other Managers & Administrators	VAR.	284,218	321,578	37,360	13.1	17,329	18
Stock Clerk, Sales Floor	4362	61,876	72,043	10,167	16.4	4,821	18
All Other Food Service Workers	5210	32,058	38,736	6,678	20.8	1,906	20
Food Prep & Service Worker, Fast Food	5216	34,227	40,924	6,697	19.6	1,684	21
Physicians & Surgeons	2610	23,776	28,760	4,984	21.0	2,263	21
Social Welfare Service Aides	2032	9,421	13,153	3,732	39.6	919	23
Carpenters	6422	41,225	48,154	6,929	16.8	2,082	24
Salespersons, Retail	4362	158,570	177,997	19,427	12.3	11,661	25

1/ Standard Occupational Classification Code. Occupational Titles were given corresponding SOC codes based on information found in the Standard Occupational Classification Manual, 1980 Edition, U.S. Department of Commerce.

2/ The rank reflects the position of each occupation in terms of employability relative to the other occupations in the table. The lower the rank the higher the probability of employment. The rank is based on a composite score for each occupation resulting from independently ranking four occupational items, then summing the ranking for each occupation and creating a final composite rank. The four factors affecting employability are: projected 1995 employment; volume of growth in the number of new jobs 1984-1995; the rate of growth between 1984 and 1995; and the number of annual average total job openings projected for 1984-1995.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 31
PENNSYLVANIA

OCCUPATIONAL EMPLOYMENT PROBABILITY ASSESSMENT REPORT
RELATIVE RANKING AND GRADE
OF
TOP 100 OCCUPATIONS

The following list of 100 occupations have a higher degree of potential employability based on a combination of the following factors: Projected Employment (1995); Volume of Growth in number of new jobs; Rate of Employment Growth; and number of Annual Average Job Openings.

			LABOR DEMAND					EMPLOYMENT PROBABILITY	
OCCUPATION 5/	SOC CODE 1/	SVP 2/	ESTIMATED 1984 EMP.	PROJECTED 1995 EMP.	VOL. OF GROWTH	RATE OF GROWTH	ANN. AVE. JOB OPEN.	RANK 3/	GRADE 4/
AO Clerical/Admin Support Wkrs	4799	3	68482	77267	8785	12.8	3357	27	A
AO Food Service Workers	5210	2	32058	38736	6678	20.8	1906	20	A
AO Health Prof & Paraprof	3690	6	9537	11234	1697	17.8	312	69	B+
AO Management Support Workers	1490	7	47815	52172	4357	9.1	1626	56	B+
AO Managers & Administrators	VAR.	7	284218	321578	37360	13.1	17329	18	A
AO Mech, Install, & Repairers	6179	4	10038	11072	1034	10.3	477	97	B
AO Prof, Paraprof, & Tech Wkrs	9991	5	28349	31621	3272	11.5	987	55	A-
AO Sales & Related Workers	4400	6	173215	197527	24312	14.0	13425	15	A+
AO Service Workers	5200	2	42639	50207	7568	17.7	4834	15	A+
AO Teachers & Instructors	2390	7	44113	49634	5521	12.5	2761	32	A
AO Trans & Mat Mov Eq Opers	8319	3	21856	23089	1233	5.6	717	83	B+
Accountants & Auditors	1412	8	41105	50445	9340	22.7	2373	9	A+
Amusement/Recreation Attendants	5254	3	5455	6401	946	17.3	395	89	B
Artists & Commercial Artists	3220	7	6565	8101	1536	23.4	436	60	B+
Auto. & Motorcycle Mechanics	6111	6	33631	40959	7328	21.8	1680	14	A+
Automotive Body & Related Repairers	6115	7	10817	12490	1673	15.5	386	73	B+
Bakers, Bread & Pastry	5214	7	9069	11119	2050	22.6	638	52	A-
Bartenders	5212	2	23678	29333	5655	23.9	2025	12	A+
Bill & Account Collectors	4786	4	3974	5045	1071	27.0	301	76	B+
Billing, Cost & Rate Clerks	4716	4	16802	17855	1053	6.3	683	99	B
Bookkpg, Account & Audit Clerks	4712	5	87757	90357	2600	3.0	4422	63	B+
Brick Masons	6412	8	8074	9175	1101	13.6	344	83	B+
Bus Drivers, School	8215	3	16122	18052	1930	12.0	1094	61	B+
Bus/Truck Mech & Diesel Eng Spec	6112	7	15265	17173	1908	12.5	543	67	B+
Carpenters	6422	7	41225	48154	6929	16.8	2082	24	A
Cashiers	4364	3	87894	112928	25034	28.5	5007	2	A+
Child Care Workers	5264	3	22902	25140	2238	9.8	1195	62	B+
Civil Engineers, Inc Traffic	1628	8	6618	7650	1032	15.6	327	93	B
Clergy	2042	8	18038	20105	2067	11.5	1754	59	B+
College & University Faculty	2200	8	51014	55887	4873	9.6	2212	49	A-
Computer Op, Ex Peripheral Equip.	4612	6	11372	14414	3042	26.7	433	43	A-
Computer Programmers	3971	7	21214	33237	12023	56.7	1248	5	A+
Computer Systems Analysts,EDP	1712	7	15693	22468	6775	43.2	835	11	A+
Construction Trades Workers	VAR.	4	18268	20047	1779	9.7	545	74	B+
Cooks, Restaurant	5214	6	22557	29431	6874	30.5	1790	8	A+
Cooks,Institution or Cafeteria	5214	6	14603	17162	2559	17.5	945	49	A-
Cooks,Sh. Ord. & Sp. Fast Food	5214	6	27599	32706	5107	18.5	995	29	A
Correction Officers & Jailers	5133	4	7070	8269	1199	17.0	258	86	B
Cost Estimators	1490	7	7213	8282	1069	14.8	288	95	B
Counter & Rental Clerks	4363	2	5216	6069	853	16.4	401	99	B
Data Processing Equipment Rprs	6154	6	3128	4751	1623	51.9	177	77	B+
Dental Assistants	5232	6	7350	9985	2635	35.9	339	46	A-
Dental Hygienists	3630	6	3246	4433	1187	36.6	158	85	B
Dentists	2620	8	6902	8909	2007	29.1	883	16	A-
Designers, Exc. Interior Design	3220	7	6841	7849	1008	14.7	356	91	B
Dining Room/Caf Attend/Bar Mlpr	5218	2	16090	19895	3805	23.6	720	28	A
Electri. & Electro. Engineer	1633	8	15140	18493	3353	22.1	704	34	A-
Electrical & Electronic Techs	3711	7	13012	14990	1978	15.2	417	65	B+
Electricians	6432	7	22141	23817	1676	7.6	846	75	B+
Food Prep & Svc Wkr, Fast Food	5216	2	34227	40924	6697	19.6	1684	21	A

TABLE 31 (cont'd)

OCCUPATION 5/	SOC CODE 1/	SVP 2/	LABOR DEMAND: ESTIMATED 1984 EMP.	PROJECTED 1995 EMP.	VOL. OF GROWTH	RATE OF GROWTH	ANN. AVE. JOB OPEN.	EMPLOYMENT PROBABILITY: RANK 3/	GRADE 4/
Food Preparation Workers	5217	2	47296	57488	10192	21.5	3002	10	A+
Food Service & Lodging Managers	1351	7	15728	18467	2739	17.4	1035	48	A-
Gardener/Groundskeeper, Ex Farm	5622	2	24401	28777	4376	17.9	1898	30	A
General Office Clerks	4630	3	102003	111492	9489	9.3	5741	38	A-
Guards	5144	3	39235	48762	9527	24.3	4843	6	A+
Hairdresser/Stylist/Cosmetologist	5253	6	26912	34976	8064	30.0	1878	7	A+
Hand Packers & Packagers	8761	2	29827	31353	1526	5.1	1231	79	B+
Heat, A/C & Refrig Mech/Instlr	6160	7	11157	12687	1530	13.7	492	72	B+
Host/Hostess, Rest/Loun/Coffee Shp	5211	7	7510	9755	2245	29.9	517	45	A-
Housekeepers, Institutional	5241	6	3356	4483	1127	33.6	330	69	B+
Ins Adjust/Examin/Investigators	4782	7	7191	8365	1174	16.3	253	93	B
Instructors & Coaches, Sport	3400	8	9207	10493	1286	14.0	592	71	B+
Insurance Sales Workers	4122	5	23197	27033	3836	16.5	1527	34	A-
Janitor & Cleaner, Ind Maint	5244	2	133241	154476	21235	15.9	13122	12	A+
Laundry/Dry Mach Op/Tndr Ex Prs	7658	2	5695	6934	1239	21.8	513	64	B+
Lawyers	2110	8	23047	27613	4566	19.8	1849	26	A
Licensed Practical Nurses	3660	6	30097	35161	5064	16.8	1592	31	A
Loan & Credit Clerks	4642	4	4528	5539	1011	22.3	269	87	B
Maint Repairers, Gen Utility	6179	4	54205	59395	5190	9.6	2426	46	A-
Medical Assistants	5233	6	5166	8271	3105	60.1	478	41	A-
Nursing Aide, Orderlies/Attend	5236	4	53655	69611	15956	0.0 29.7	3485	3	A+
Operating Engineers	8312	6	13004	14252	1248	9.6	508	80	B+
Order Clerk, Mat, Merchan & Svc	4664	3	13013	14164	1151	8.8	536	87	B
Paralegal Personnel	3960	7	3326	5604	2278	68.5	325	57	B+
Physical Therapists	3033	7	2741	3845	1104	40.3	170	90	B
Physicians & Surgeons	2610	8	23776	28760	4984	21.0	2263	21	A
Pub Rel Specialist & Pub Writers	3320	7	3249	4148	899	27.7	217	95	B
Radiologic Technol. & Techni	3650	7	6060	7317	1257	20.7	174	92	B
Receptionist/Information Clerks	4645	4	27983	32160	4177	14.9	1535	41	A-
Registered Nurses	2900	7	85553	114267	28714	33.6	5268	1	A+
Roofers	6468	7	6587	7833	1246	18.9	235	82	B+
Sales Agents, Real Estate	4123	5	9306	11546	2240	24.1	875	38	A-
Salespersons, Retail	4362	3	158570	177997	19427	12.3	11661	25	A
Secretaries	4622	6	156137	168308	12171	7.8	5729	43	A-
Securities & Fin Svcs Sales Wkrs	4124	7	11598	15828	4230	36.5	1098	17	A
Social Welfare Service Aides	2032	3	9421	13153	3732	39.6	919	23	A
Social Workers	2032	7	18697	22338	3641	19.5	875	41	A-
Stock Clerks, Sales Floor	4362	3	61876	72043	10167	16.4	4821	18	A
Switchboard Operators	4732	3	11523	13519	1996	17.3	661	58	B+
Taxi Drivers & Chauffeurs	8216	3	4010	5058	1048	26.1	429	68	B+
Teach/Instruct, Voc Ed & Training	2390	7	8667	9731	1064	12.3	540	81	B+
Teacher Aide/Ed Assistant	4795	3	19327	22476	3149	16.3	928	51	A-
Teachers, Preschool & Elementa	2320	7	60695	67834	7139	11.8	2140	33	A
Teachers, Secondary School	2330	7	65044	70478	5434	8.4	1924	54	A-
Tellers	4791	5	27537	31102	3565	12.9	825	53	A-
Travel Agents	4369	5	3445	4452	1007	29.2	322	78	B+
Truck Drivers	8213	3	115405	126222	10817	9.4	4499	38	A-
Veh. Washers & Equip. Cleane	8750	2	7563	9065	1502	19.9	342	66	B+
Waiters and Waitresses	5213	3	84006	107057	23051	27.4	4427	4	A+
Writers & Editors	3980	7	7874	8872	998	12.7	375	98	B

TABLE 31 (cont'd)

1/ Standard Occupational Classification code. Occupational titles were given corresponding SOC codes based on information found in the Standard Occupational Classification Manual, 1980 Edition, U.S. Department of Commerce.

2/ Specific Vocational Preparation code. SVP denotes the training time required to learn the techniques, acquire information, and develop the facility needed for average performance in a specific job. The training may be acquired in a school, work, military, institutional, or vocational environment. Below are the SVP codes and the corresponding training time required.

2 - Anything beyond a short demonstration up to and including 30 days.
3 - Over 30 days up to and including 3 months.
4 - Over 3 months up to and including 6 months.
5 - Over 6 months up to and including 1 year.
6 - Over 1 year up to and including 2 years.
7 - Over 2 years up to and including 4 years.
8 - Over 4 years up to and including 10 years.

3/ The rank reflects the position of each occupation in terms of employability relative to the other occupations in the table. The lower the rank the higher the probability of employment. The rank is based on a composite score for each occupation resulting from independently ranking four occupational items, then summing the rankings for each occupation and creating a final composite rank. The four factors affecting employability are: projected 1995 employment; volume of growth in the number of new jobs 1984-1995; the rate of growth between 1984 and 1995; and the number of annual average total job openings projected for 1984-1995.

4/ The grading scheme is based on the rank assigned to each occupation. The top 10 percent are A+, A, and A-; the next 15 percent are B+, B, and B-; the next 45 percent are C+, C, and C-; with the remaining 30 percent as D+, D, and D-.

5/ AO represents 'All Others' - includes all other workers for that occupational grouping not separately classified.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

TABLE 32

PENNSYLVANIA

EMPLOYMENT BY OCCUPATION AND ANNUAL AVERAGE JOB OPENINGS
1984 and Projected 1995

Occupational Grouping	Estimated 1984 Employment	Estimated 1995 Employment	Net Change 1984-95	Ann. Avg. Job Openings	% Dist. Of 1995 Empl.
TOTAL, ALL OCCUPATIONS	5,089,916	5,531,643	441,727	250,436	100.0
White Collar Workers	2,686,877	3,023,980	337,103	141,148	54.7
Managerial & Mgt. Rel. Occs.	459,636	518,435	58,799	25,827	9.4
Prof., Paraprof. & Tech. Occs	812,064	947,775	135,711	40,491	17.1
Marketing & Sales Occs.	537,276	628,092	91,816	39,414	11.4
Admin. Support Occs., Inc. Clerical	877,901	928,678	50,777	35,416	16.8
Blue Collar Workers	1,534,354	1,481,031	(53,323)	46,172	26.8
Precision Production, Craft & Repair	624,109	636,887	12,778	22,788	11.5
Operators & Fabricators	697,371	634,292	(63,079)	17,902	11.5
Helpers, Laborers & Mat. Mov. Occs.	212,874	209,852	(3,022)	5,482	3.8
Service Workers	777,974	936,230	158,256	57,838	16.9
Cleaning & Bldg. Serv. Occs.	135,050	156,383	21,333	13,180	2.8
Food & Bev. Prep. & Serv.	318,693	393,606	74,913	18,647	7.1
Health Service Occs.	80,155	103,957	23,802	4,956	1.9
Personal Serv. Occs.	74,663	90,853	16,190	5,218	1.6
Protective Serv. Occs.	97,510	110,893	13,383	6,867	2.0
Other Service Occs.	71,903	80,538	8,635	8,872	1.5
Agric., Forestry, Fishing & Rel. Occs.	90,713	90,402	(311)	5,287	1.6

SOURCE: Bureau of Research and Statistics
Department of Labor and Industry

Data may not add to totals due to rounding.

SECTION V

TRAINING AND PLACEMENT ASSISTANCE INFORMATION

A. Labor Supply

Section V deals primarily with a comparison of labor supply and labor demand.

The supply of labor comes from a variety of sources: graduates of educational programs, new residents of the area, retraining within an industry, and people seeking to change jobs. Only the first of these sources can be measured accurately, since government has no consistent method to determine the extent of the others. Each year large numbers of graduates of high schools, colleges, business schools, trade schools, and vocational education programs enter the job market in search of work. These new entrants to the labor force form a large proportion of the inexperienced labor supply.

The more experienced portion of the labor supply comes primarily from people who are laid off from their jobs or who seek to change jobs, while a smaller portion comes from in-migration of people from outside the state. Many of these experienced workers, but by no means all, register for work in Job Centers or Job Service local offices. A summary of registered job applicants is given in Table 35, which will be discussed in more detail in Section V-C. Although not all jobseekers will be represented in Job Service files, a look at applicants registered for work gives a good estimate of the supply of labor.

There is also the "invisible" portion of the labor supply. This is made up of people who change jobs within a company. The upward mobility of workers within an organization provides one of the largest shares of the supply and is usually the best source of experienced personnel.

Some idea of future labor supply can be discerned from an examination of school enrollment patterns as detailed in Table 33. During the 17-year period from 1972 to 1989, public school enrollment declined steadily each year from 2,361,285 in 1972 to 1,658,335 in 1989, a drop of 29.8 percent. Enrollment in non-public schools, which did show small increases in two academic years, has suffered a net decline of 23.3 percent during the same period. Generally speaking, yearly percent declines in public school enrollment have dropped to one percent or below during recent years while that of non-public schools have remained around two percent.

There are several reasons for the drop-off in school enrollments: declining population in general, a lower birthrate with many two-career couples postponing the start of a family, and out-migration of young adults with school-age children in order to seek employment elsewhere. The impact of this trend is significant for the state in terms of job opportunities for teachers and for its implication of a sharp reduction in new entrants to the labor force in future years.

On June 30, 1989, the active file contained over 2,000 registered applicants each in five occupations. In descending order they were: material handler (5,762), construction worker I (3,463), general clerk (3,037), construction worker II (2,735), and clerical secretary (2,240).

Job Service local offices received a total of 195,786 job openings during the same time period, an average of one opening for every three registered applicants. Of these openings, 132,294 or just over 67 percent, were filled during the fiscal year. It might seem odd that over 30 percent of the openings went unfilled despite large numbers of registered job-seekers. This is because some of the job orders were subsequently cancelled by the employer, some were filled by the employer with applicants who were not referred by Job Service, some were for workers with highly specialized technical skills and lengthy experience requirements that could not be found among the registered applicants, and some were received only a few days before the end of the fiscal year and had not yet been filled by June 30th.

While clerical, sales, and service occupations accounted for the largest numbers of job applicants, these fields also constituted the bulk of the job openings received. Nearly 48 percent of the openings received, and 47 percent of the openings filled were in these categories. In all broad occupational areas applicants outnumbered listed openings; the average ratio was 3.02 applicants for each opening. This ratio of applicants to openings ranged from a low of 1.83 for service occupations to 4.90 for professional, technical and managerial occupations.

TABLE 33
PENNSYLVANIA
SCHOOL ENROLLMENT 1972-1989

PUBLIC

YEAR	Elementary K - 6	Secondary 7 - 12	Total	% Change From Prior Year
1972-73	1,224,959	1,136,326	2,361,285	
1973-74	1,183,777	1,137,660	2,321,437	-1.69
1974-75	1,149,633	1,127,818	2,277,451	-1.89
1975-76	1,129,451	1,116,696	2,246,147	-1.37
1976-77	1,093,578	1,100,095	2,193,673	-2.34
1977-78	1,054,040	1,074,833	2,128,873	-2.95
1978-79	1,008,664	1,038,082	2,046,746	-3.86
1979-80	968,325	1,000,476	1,968,801	-3.81
1980-81	940,387	968,905	1,909,292	-3.02
1981-82	903,342	935,673	1,839,015	-3.68
1982-83	872,629	911,340	1,783,969	-2.99
1983-84	846,145	891,807	1,737,952	-2.58
1984-85	833,996	867,884	1,701,880	-2.08
1985-86	841,419	841,802	1,683,221	-1.10
1986-87	856,962	817,199	1,674,161	-0.54
1987-88	874,784	793,758	1,668,542	-0.34
1988-89	896,213	762,122	1,658,335	-0.61

NON-PUBLIC

YEAR	Elementary K - 6	Secondary 7 - 12	Total	% Change From Prior Year
1972-73	334,165	121,937	456,102	
1973-74	321,056	122,939	443,995	-2.65
1974-75	310,669	122,723	433,392	-2.39
1975-76	306,037	121,932	427,969	-1.25
1976-77	302,387	121,667	424,054	-0.91
1977-78	296,973	119,730	416,703	-1.73
1978-79	289,630	116,855	406,485	-2.45
1979-80	285,514	114,441	399,955	-1.61
1980-81	280,319	112,083	392,402	-1.89
1981-82	281,357	112,742	394,099	0.43
1982-83	288,665	112,963	401,628	1.91
1983-84	285,372	110,861	396,233	-1.34
1984-85	278,236	107,784	386,020	-2.58
1985-86	270,541	103,857	374,398	-3.01
1986-87	267,241	99,438	366,679	-2.06
1987-88	263,579	93,434	357,013	-2.64
1988-89	260,876	89,188	350,064	-1.95

SOURCE: Public and Nonpublic School Enrollment 1972-89, Pennsylvania Department of Education

SECTION V

TRAINING AND PLACEMENT ASSISTANCE INFORMATION

B. Labor Demand

The demand for labor stems from a variety of sources: new employers who move into the area, new businesses started by area residents, and business expansions by existing employers. However, the largest portion of labor demand comes from the need to replace existing workers who retire, die, become disabled, change jobs, are promoted, or leave the area. Replacements account for about 84 percent of total labor demand statewide. The demand for workers varies considerably among industries and occupations.

The demand for labor is directly related to the data covered in Section IV on occupational projections. Usually the strongest demand exists in the clerical, sales, and service areas, not only because these occupations are so often found in the industries that are expanding, but also because many of these jobs experience frequent turnover. Jobs that require few skills, are boring or repetitious in nature, or offer low pay and little opportunity for advancement will not induce workers to remain in them for very long. Therefore, these jobs have high turnover and must be refilled often. Consequently, they contribute disproportionately to aggregate labor demand. This does not mean that only less desirable jobs constitute labor demand, but simply that by their nature, jobs with high turnover form a sizable share of the labor demand list. Table 35 in Section V-C shows current labor demand in more detail.

Table 34 shows the estimated 1984 and projected 1995 distribution of broad occupational categories within selected industries in Pennsylvania. This format was chosen because it clearly depicts the staffing (human resource) structure of industry within the state. A typical example illustrating use of the table would be that of a clerical worker in search of employment. The job-seeker would first enter the table in the Administrative Support Occupations Including Clerical row and then proceed across to find the highest totals. Immediately Finance, Insurance and Real Estate, Trade, and Services, stand out with the highest total employment for both 1984 and 1995. The job search would obviously begin with these industries. Continued analysis indicates that Services has the greatest number of professional, paraprofessional, and technical occupations, as well as the largest number of managerial and management related occupations. Tracking specific occupations (accountants, welders, etc.) within any of the broad categories listed is possible by consulting reference volumes of staffing patterns prepared by the Occupational Employment Statistics and Industrial Surveys Division, Bureau of Research and Statistics. Area Labor Market Analysts have these publications on file.

TABLE 34
PENNSYLVANIA

OCCUPATIONAL EMPLOYMENT SUMMARY BY MAJOR INDUSTRY DIVISION 1/

1984 and Projected 1995

	Year	Total All Industries	Agri. & Related	Mining	Construction	Manufacturing	Trans., Comm., & Utilities	Trade	Finance, Ins., & Real Est.	Services 2/	Govt.
Total All Occupations	1984	4,715,902	41,273	38,678	175,698	1,124,001	245,015	1,033,055	251,886	1,417,044	389,252
	1995	5,154,320	43,427	33,538	208,899	953,234	245,284	1,219,801	304,122	1,754,804	391,411
Managerial & Mgt. Rel. Occupations	1984	416,824	1,045	2,734	17,690	87,159	19,389	93,759	45,678	98,972	50,398
	1995	482,540	1,295	2,550	21,841	82,182	19,759	114,724	58,893	129,318	51,978
Professional, Paraprof., & Technical Occpns.	1984	741,723	1,942	1,398	5,548	85,915	20,184	18,401	9,750	536,273	62,312
	1995	871,691	2,476	1,304	6,320	82,463	21,640	22,883	13,755	655,928	64,924
Marketing & Sales Occupations	1984	470,761	467	290	2,369	33,306	10,536	354,931	33,832	29,961	5,069
	1995	556,550	545	302	2,878	30,017	11,779	424,100	42,331	39,241	5,357
Adm. Support Occpns. Incl. Clerical	1984	856,831	1,997	2,649	17,392	131,455	53,385	138,989	140,124	260,508	110,332
	1995	910,880	2,123	2,270	18,543	106,408	50,455	147,785	182,483	316,786	104,007
Service Occupations	1984	736,279	507	415	1,141	19,898	6,277	247,408	11,439	370,034	79,160
	1995	889,650	531	306	1,242	16,145	6,818	307,162	13,272	481,915	82,259
Ag., Forest., Fish. & Rel. Occpns.	1984	53,443	31,852	43	564	2,355	80	1,998	3,522	10,238	2,795
	1995	56,893	32,553	44	653	2,531	83	2,498	4,028	11,713	2,790
Precision Prod., Craft & Repair Occpns.	1984	557,394	951	15,400	93,493	210,464	51,509	78,248	6,627	58,420	42,282
	1995	568,909	1,101	13,399	113,587	176,892	47,978	91,949	8,274	73,163	42,566
Operators & Fabricators	1984	673,171	1,449	11,506	13,649	454,861	87,285	62,594	535	37,489	23,803
	1995	610,617	1,636	10,098	16,429	373,156	69,997	67,410	637	46,741	24,513
Helpers, Laborers & Mat. Mov. Occpns.	1984	209,476	1,063	4,243	23,852	98,588	16,370	36,729	379	15,151	13,101
	1995	206,610	1,167	3,265	27,408	83,440	16,775	41,290	449	19,801	13,017

1/Excludes self-employed and unpaid family workers.

2/Includes state and local government employment in hospitals and education.

SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

SECTION V

TRAINING AND PLACEMENT ASSISTANCE INFORMATION

C. Labor Supply and Demand

The comparison of labor supply and demand is always difficult, since neither figure can be measured precisely. The principal table in this section, Table 35, examines the active files in Pennsylvania State Job Service local offices and compares registered applicants with job openings received. In most areas, Job Service files contain a large number of applicants seeking employment in clerical, sales, and service occupations. In addition, a large share of the job openings are for persons in those occupational groups. There are a number of reasons for this. In large measure, these are the kinds of openings that are especially suited for filling through a public employment service agency. Employers seeking to fill these jobs often have large numbers of openings to fill, and the skills they require are generally not highly specialized. These jobs frequently do not require more than a high school education or some form of vocational training. Furthermore, many of them are high-turnover jobs, so they appear frequently in job listings. Private employment agencies frequently specialize in particular types of clients, such as managerial or technical personnel, rather than a broad range of occupations. Employers seeking to hire professional, technical, or upper-level managerial workers frequently utilize private agencies and a variety of other search techniques, as well as using the local Job Service office. These techniques include contacting professional societies, placing ads in professional journals, recruiting on college campuses, and using "headhunter" companies. Because of this, state Job Service agencies get a smaller share of the job openings in these fields than is the case for clerical, sales, and service occupations.

Nevertheless, some broad conclusions on occupational supply and demand can be drawn on the basis of a comparison between applicants registered in Pennsylvania State Job Service local offices and the job openings received by those offices.

From July 1, 1988, through June 30, 1989, 591,980 applicants have registered with State Job Center Offices in Pennsylvania. Of this number 133,368 or 22.5 percent were in the clerical and sales occupations category while 87,535 applicants or 14.8 percent were categorized in service occupations. Agriculture, fishing and forestry occupations had the fewest registered applicants with 5,228. Approximately 28 percent or 168,040 of total registrants were in the active file as of the end of June with 62,641 of the number females.

During the year, the following thirteen specific occupations each had more than 5,000 registered applicants assigned to them. In order they are: material handler (21,197), general clerk (12,004), construction worker I (10,817), commercial cleaner (10,218), construction worker II (8,160), clerical secretary (7,701), administrative clerk (7,137), nurse aide (6,217), carpenter (6,127), hand packager (6,105), tractor-trailer truck driver (5,502), heavy truck driver (5,457), and clerk-typist (5,048).

On June 30, 1989, the active file contained over 2,000 registered applicants each in five occupations. In descending order they were: material handler (5,762), construction worker I (3,463), general clerk (3,037), construction worker II (2,735), and clerical secretary (2,240).

Job Service local offices received a total of 195,786 job openings during the same time period, an average of one opening for every three registered applicants. Of these openings, 132,294 or just over 67 percent, were filled during the fiscal year. It might seem odd that over 30 percent of the openings went unfilled despite large numbers of registered job-seekers. This is because some of the job orders were subsequently cancelled by the employer, some were filled by the employer with applicants who were not referred by Job Service, some were for workers with highly specialized technical skills and lengthy experience requirements that could not be found among the registered applicants, and some were received only a few days before the end of the fiscal year and had not yet been filled by June 30th.

While clerical, sales, and service occupations accounted for the largest numbers of job applicants, these fields also constituted the bulk of the job openings received. Nearly 48 percent of the openings received, and 47 percent of the openings filled were in these categories. In all broad occupational areas applicants outnumbered listed openings; the average ratio was 3.02 applicants for each opening. This ratio of applicants to openings ranged from a low of 1.83 for service occupations to 4.90 for professional, technical and managerial occupations.

TABLE 35

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS

BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
XXX	TOTAL - ALL OCCUPATIONS (INCL. ENTRY)	591,980	168,040	62,641	195,786	132,294
0 & 1	PROFESSIONAL, TECHNICAL, MANAGERIAL OCC.	76,241	23,803	9,619	15,572	10,746
2	CLERICAL AND SALES OCCUPATIONS	133,368	36,001	25,944	45,644	28,479
3	SERVICE OCCUPATIONS	87,535	21,871	11,321	47,844	33,117
4	AGRICULTURE, FISHING, FORESTRY OCCUP.	5,228	1,525	189	2,359	1,966
5	PROCESSING OCCUPATIONS	22,742	6,303	1,236	9,053	7,007
6	MACHINE TRADES OCCUPATIONS	44,890	13,604	1,950	11,383	6,789
7	BENCHWORK OCCUPATIONS	36,173	10,163	5,952	11,851	8,373
8	STRUCTURAL WORK OCCUPATIONS	85,712	27,002	949	19,183	11,833
9	MISCELLANEOUS OCCUPATIONS	100,004	27,756	5,475	32,852	23,947
INA	INVALID CODES	87	12	6	45	37

* July 1, 1988 through June 30, 1989.

See footnote at end of table

TABLE 35

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

(continued)

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
003.161-014	Electrical Test Engineer	1,488	500	26	102	45
007.061-014	Engineer, Mechanical	549	169	10	91	8
012.167-066	Systems Analyst	689	238	77	67	8
020.162-014	Programmer, Business	591	182	56	63	15
029.261-010	Laboratory Tester	397	135	50	149	69
045.107-010	Counselor	754	203	91	99	40
075.374-010	Nurse, General Duty	468	126	114	124	32
079.367-010	Medical Assistant	720	201	168	46	17
079.371-010	Dental Assistant	563	142	129	72	22
079.374-014	Nurse, Licensed Practical	1,060	268	251	312	191
091.227-010	Teacher, Secondary School	1,114	346	189	5,818	5,565
092.227-010	Teacher, Elementary School	1,002	313	267	31	17
160.167-010	Accountant	2,053	665	272	127	40
162.157-038	Purchasing Agent	924	320	76	44	14
163.167-018	Sales Manager	2,063	728	120	40	5
165.067-010	Public-Relations Representative	575	180	121	16	7
169.167-010	Administrative Assistant	2,823	929	689	169	76
169.167-034	Office Manager	2,569	862	630	92	32
185.167-046	Retail Store Manager	3,851	1,240	609	292	96
187.167-106	Food Service Manager	2,185	659	248	191	59
195.107-010	Caseworker	502	121	61	141	113
201.362-010	Legal Secretary	1,067	324	317	190	61

* July 1, 1988 through June 30, 1989.

See footnote at end of table

TABLE 35

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

(continued)

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
201.362-014	Medical Secretary	791	213	209	110	46
201.362-030	Clerical Secretary	7,701	2,240	2,196	1,344	508
203.362-010	Clerk-Typist	5,048	1,362	1,287	1,558	802
203.582-030	Keypunch Operator	451	99	82	164	101
205.367-054	Survey Worker	372	73	43	1,730	1,394
206.362-010	File Clerk	383	104	87	232	173
209.562-010	Clerk-General	12,004	3,037	2,644	5,320	4,175
209.587-026	Mail Clerk	728	226	98	458	307
209.687-014	Mail Handler	272	88	39	425	391
210.382-014	Bookkeeper	2,847	930	834	455	186
210.382-018	Bookkeeper II	731	229	214	119	50
211.362-010	Cashier I	1,803	396	349	355	141
211.362-018	Teller	1,095	275	240	683	411
211.462-010	Cashier II	3,273	810	711	1,065	579
213.362-010	Computer Operator	2,578	776	396	222	94
215.482-010	Payroll Clerk	504	162	125	92	31
216.482-010	Accounting Clerk	3,033	948	776	535	191
219.362-010	Administrative Clerk	7,137	1,981	1,797	1,428	819
222.387-058	Clerical Stock Clerk	1,928	469	98	921	666
235.662-022	Telephone Operator	370	87	80	179	67
237.367-038	Receptionist	3,937	1,126	1,110	1,048	408
238.362-010	Hotel Clerk	331	68	47	242	127

* July 1, 1988 through June 30, 1989.

See footnote at end of table

TABLE 35

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

(continued)

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
241.357-010	Collection Clerk	211	34	20	156	114
249.367-074	Teacher Aide	519	127	110	700	652
250.257-010	Sales Agent	506	161	39	228	51
261.357-062	Salesperson, Shoes	231	62	44	249	70
261.357-066	Women's Apparel Salesperson	526	169	167	228	47
273.353-010	Automobile Salesperson	777	257	25	101	31
279.357-050	General Hardware Salesperson	289	85	24	242	145
279.357-054	General Merchandise Salesperson	3,942	675	362	2,568	2,187
279.357-062	Salesperson, Parts	386	108	20	226	78
290.477-014	Sales Clerk	4,453	1,082	875	2,169	1,135
290.477-018	Sales Clerk, Food	1,021	260	155	1,398	1,012
292.353-010	Sales Route Driver	1,351	414	31	503	228
299.137-010	Manager, Department (Retail Trade)	576	169	103	88	38
299.357-014	Telephone Solicitor	749	225	172	736	327
301.474-010	General House Worker	294	73	72	220	31
309.677-010	Companion	336	79	76	149	50
311.477-014	Counter Attendant	956	222	192	1,045	541
311.477-030	Informal Waiter/Waitress	4,962	1,131	1,058	4,144	3,173
311.677-010	Cafeteria Attendant	354	118	102	119	67
312.474-010	Bartender	1,897	528	279	419	150
313.131-014	Chef	462	115	14	51	23
313.361-014	Cook	3,771	952	438	2,356	1,045

* July 1, 1988 through June 30, 1989.

See footnote at end of table

TABLE 35

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

(continued)

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
313.361-022	Short Order Cook	1,863	455	183	770	220
315.361-010	Institutional Cook	1,212	358	152	370	110
316.684-018	Meat Cutter	629	178	4	132	50
317.684-014	Pantry Goods Maker	216	64	46	120	49
317.687-010	Cook Helper	355	95	54	137	56
318.687-010	Kitchen Helper	3,658	877	310	2,301	1,335
323.687-010	Hospital Cleaner	399	107	81	172	107
323.687-014	Housekeeping Cleaner	1,724	374	320	964	528
332.271-010	Cosmetologist	819	213	197	112	31
355.674-014	Nurse Aide	6,217	1,538	1,350	2,170	1,414
355.677-010	Hospital Food Service Worker	892	192	146	447	302
359.677-010	Children's Institution Attendant	431	78	52	552	585
359.677-018	Nursery School Attendant	593	146	138	163	58
361.687-018	Laundry Laborer	178	59	41	113	77
363.682-018	Machine Presser	482	154	65	188	116
363.684-018	Hand Presser	300	76	61	96	56
372.667-018	Correction Officer	300	77	12	317	273
372.667-034	Security Guard	4,461	1,297	102	2,597	1,872
372.667-038	Merchant Patroller	1,664	268	38	1,481	1,187
381.687-014	Commercial Cleaner	10,218	1,998	657	12,376	11,009
403.687-018	Harvest Worker, Fruit	413	14	0	2	2
406.684-010	Cemetery Worker	82	22	2	277	234
408.161-010	Landscape Gardener	466	185	11	23	8

* July 1, 1988 through June 30, 1989.

See footnote at end of table

TABLE 35

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

(continued)

DOT CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
410.684-010	Dairy Farmworker	189	55	2	1	0
509.686-010	General Laborer	3,542	1,092	59	1,985	1,791
519.687-022	General Foundry Worker	662	193	7	508	406
526.381-010	Baker	367	110	40	103	37
526.684-010	Doughnut Maker	80	22	8	48	15
526.686-010	Batter Scaler	256	80	31	176	103
529.686-014	Cannery Worker	152	43	24	237	191
529.687-186	Sorter, Agricultural Produce	17	6	3	99	99
556.685-038	Injection Molding Machine Tender	272	68	37	205	148
559.567-010	Plastic Material Laborer	56	24	6	299	229
579.687-030	Glass Product Selector	234	82	49	274	256
600.280-022	Machinist	2,505	727	25	658	391
600.380-018	Machine Set-Up Operator	677	177	11	321	157
601.280-046	Tool and Die Maker	417	123	5	56	19
604.685-026	Lathe Operator	222	72	9	65	38
609.684-014	General Machine Shop Laborer	729	234	47	632	484
609.685-018	Production-Machine Tender	2,469	810	273	1,358	1,147
615.482-022	Punch-Press Operator	480	168	39	113	95
620.261-010	Automobile Mechanic	4,498	1,379	14	1,018	376
620.261-022	Construction-Equipment Mechanic	634	227	2	60	16
625.281-010	Diesel Mechanic	860	285	2	191	67

* July 1, 1988 through June 30, 1989.

See footnote at end of table

TABLE 35

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

(continued)

DOT CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
625.281-034	Small Engine Mechanic	223	70	0	73	31
637.261-014	Environmental-Cntrl-Syst Installer/Serv.	625	197	1	127	41
638.281-014	Maintenance Mechanic	2,307	748	8	466	239
638.281-018	Millwright	710	218	1	143	65
660.280-010	Woodworking Cabinetmaker	353	122	5	61	23
690.682-082	Standard Machine Stitcher	181	59	55	142	118
721.684-022	Electric-Motor Assembler	165	28	17	55	75
726.684-018	Electronics Assembler	1,624	510	392	917	713
729.687-010	Assembler, Electrical Accesories	234	65	42	15	12
739.687-030	Small Product Assembler	491	166	115	179	134
741.684-026	Spray Painter	581	168	13	157	101
781.687-010	Assembler	152	51	43	76	44
782.684-058	Sewer, Hand	318	99	84	67	30
785.261-010	Alteration Tailor	122	40	34	63	13
787.682-046	Sewing-Machine Operator	1,888	475	462	914	542
804.281-010	Sheet-Metal Worker	917	310	11	155	54
806.381-058	Trailer Assembler	87	30	2	79	69
806.684-010	Automobile Assembler	1,440	414	45	104	36
807.381-010	Automobile-Body Repairer	1,408	412	5	338	150
819.384-010	Combination Welder	2,313	726	14	436	230
824.261-010	Electrician	2,814	974	10	492	222
828.281-010	Electronics Mechanic	1,630	531	17	149	64

* July 1, 1988 through June 30, 1989.

See footnote at end of table

TABLE 35

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

(continued)

DOT CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
829.281-014	Electrical Repairer	544	166	1	129	64
840.381-010	Construction Painter	1,975	647	24	361	192
844.364-010	Cement Mason	668	222	4	120	40
859.683-010	Operating Engineer	3,392	1,245	22	260	132
860.381-022	Carpenter	6,127	1,984	14	1,114	566
861.381-018	Bricklayer	833	299	2	157	67
862.381-018	Pipe Fitter	860	268	7	104	50
862.381-030	Plumber	805	306	3	127	41
862.684-014	Construction or Leak Gang Laborer	348	114	5	88	60
866.381-010	Roofer	1,348	459	6	275	95
869.664-014	Construction Worker I	10,817	3,463	63	2,568	1,650
869.684-010	Assembler I	268	85	1	712	616
869.687-026	Construction Worker II	8,160	2,735	57	2,682	2,421
899.281-014	Factory or Mill Maintenance Repairer	618	209	1	148	102
899.381-010	Building Maintenance Repairer	3,959	1,224	12	2,184	1,245
904.383-010	Tractor-Trailer-Truck Driver	5,502	1,836	39	1,520	679
905.663-014	Heavy Truck Driver	5,457	1,788	19	886	464
906.683-022	Light Truck Driver	2,726	857	38	1,034	533
913.463-010	Bus Driver	2,227	638	335	299	188
915.467-010	Automobile Service Station Attendant	889	231	12	492	188
915.473-010	Parking Lot Attendant	143	38	1	100	56
919.687-014	Transportation Vehicle Cleaner	388	114	12	332	173

* July 1, 1987 through June 30, 1988.

See footnote at end of table

TABLE 35

PENNSYLVANIA

REGISTERED APPLICANTS AND NONAGRICULTURAL JOB OPENINGS
BY PRIMARY OCCUPATIONAL CATEGORIES AND FOR SELECTED OCCUPATIONS

(continued)

D O T CODE	OCCUPATION OR OCCUPATIONAL GROUPING	REGISTERED APPLICANTS			NONAGRICULTURAL JOB OPENINGS	
		FISCAL YEAR TO DATE *	ACTIVE		FISCAL YEAR TO DATE *	
		TOTAL REGISTERED	TOTAL	FEMALE	TOTAL RECEIVED	TOTAL FILLED
920.587-018	Hand Packager	6,105	1,707	1,335	3,444	2,565
920.685-078	Machine Packager	1,078	339	227	457	360
920.687-014	Grocery Bagger	141	41	9	402	354
921.663-010	Bridge- or Gantry-Crane Operator	715	236	11	43	29
929.686-010	Bakery Worker	168	44	24	193	130
929.687-022	Laborer, Salvage	323	96	10	149	78
929.687-030	Material Handler	21,197	5,762	736	14,177	11,985
971.381-050	Stripper, Printing	71	22	11	33	29

SOURCE: Bureau of Research and Statistics, Employment Security Automated Reporting System (ESARS) Table 96, June 30, 1989.

NOTES: Active data are for June 30, 1989.

All other data are the totals for the Fiscal Year to Date.

The number of Job Openings filled may exceed the number of openings received because of openings on hand at the beginning of the Fiscal period in addition to openings received during the current Fiscal period.

* Fiscal Year to Date - July 1, 1988 through June 30, 1989.

SECTION VI

CHARACTERISTICS AND TRENDS IN UNEMPLOYMENT

This section examines recent trends in unemployment. The unemployment rate is one of the most closely watched of all economic indicators and the one that arouses the most public interest. Of course, the jobless rate is not the sole indicator of economic health; factory output, productivity, interest rates, electric utility usage, per capita income, wages, public debt, personal savings rates, imports and exports, and many other factors must be weighed in order to fully judge the state of the economy, and most of these factors are outside the scope of this report. Even employment and unemployment can be misleading if consideration is not given to the changing nature of the job market and the pay scales and benefits of the jobs being created in growth industries compared with those of the jobs lost during the recession. These difficult-to-measure factors are related to the extent to which the average person in the labor force is in an improved or worsened position after the recession and the changes in the industrial base.

During 1988, unemployment in Pennsylvania fell to its lowest point since 1974. On an annual average basis there were 294,000 Pennsylvania residents out of work during 1988, a drop of 26,000 since 1987 and the lowest jobless figure since 1974 when 259,000 residents were unemployed. Unemployment, as a percent of the civilian labor force, fell to 5.1 percent in 1988, a significant decrease from the double-digit rates of 1982 and 1983. Table 36 provides further historical labor force data (1976 through 1988) for the sum of Pennsylvania's Metropolitan Areas, the state of Pennsylvania as a whole and for the nation. For comparative purposes the United States' 1988 average unemployment rate of 5.5 percent equates to 6,701,000 out of work, the lowest jobless figure since 1979 when 6,137,000 persons were unemployed.

The insured unemployed are those unemployed persons who are currently receiving unemployment compensation benefits. They constitute a large portion of the unemployed, but they are only part of the total. There are other groups of jobseekers who are not part of this group: exhaustees (persons who have exhausted their benefits), people who were disqualified from receiving benefits for either monetary or nonmonetary reasons, new entrants and re-entrants to the labor force, persons who were laid off from industries not covered by the Pennsylvania unemployment compensation law, and persons covered by private unemployment systems (e.g. railroad workers). Persons who fall into these groups are still considered to be unemployed and are included in the total estimate of unemployed persons. However, it is not possible to determine characteristics of individuals in these groups, since many of them do not file claims for unemployment compensation (UC) benefits and some do not even enter a UC claims office. Hence, it is possible to study the characteristics only of the insured unemployed, since they file a UC claim and provide a variety of information for statistical purposes.

Characteristics of the insured unemployed are given in Table 37 for the state of Pennsylvania for the four quarters of 1988. Nearly 62 percent of the unemployment compensation recipients were men, a reflection of the numbers of people laid off from the state's durable goods factories. Men were even more heavily represented during the first quarter, when winter

weather causes layoffs in construction and agriculture. Over half of the claimants (55.91 percent) were between the ages of 25 and 44, the result of layoffs of younger workers with little seniority, as well as the difficulty always encountered by those who have little on-the-job experience. Approximately one-third of the claimants last worked in manufacturing, while wholesale/retail trade and services/miscellaneous (including government) combined accounted for over 38 percent. The construction sector also was a large contributor of unemployment with 18 percent of the insured unemployed represented in this industry.

Among occupations, structural workers had the highest share of unemployment for 1988 with an average of 24.43 percent of the total. The 32.29 percent recorded in the first quarter for this occupation was the highest quarterly percentage recorded during the year for any occupation listed.

Table 38 ranks the 40 labor market areas in Pennsylvania by their 1987 and 1988 annual average jobless rates. The Waynesburg Labor Market Area (Greene County) held the unenviable spot at the bottom of the list with the highest unemployment rate in both years. However, its unemployment rate did fall from 13.3 percent in 1987 to 11.1 percent in 1988. In both years, the Lancaster MSA had the lowest unemployment rate in the state; its rate dropped from 3.9 percent in 1987 to just 3.5 percent in 1988. Among the state's 40 labor market areas, unemployment rates declined between 1987 and 1988 in all of them except Bedford (whose rate rose from 8.0 to 8.4 percent) and Indiana (whose rate rose nominally from 9.2 to 9.3 percent). The nine labor market areas with the highest unemployment rates in 1988 are in western Pennsylvania; the nine with the lowest rates are all in the eastern or central parts of the state. This indicates that western Pennsylvania has failed to recover from the recession as rapidly as the eastern half of the state. Much of the problem can be attributed to the massive scale-downs of employment and plant closings in such industries as primary and fabricated metals, electrical and nonelectrical machinery, transportation equipment, and mining.

Table 39 is a listing of Labor Surplus Areas in Pennsylvania. These are areas whose jobless rate is significantly higher than the national average for a 24-month reference period. Employers who are located in Labor Surplus Areas are eligible for preference in bidding on federal government procurement contracts under Defense Manpower Policy No. 4B and Executive Orders 12073 and 10582 (implementing the Buy American Act). More specific information on the criteria for labor surplus areas is given at the bottom of Table 39. The current list of labor surplus areas will remain in effect for the period October 1, 1989 through September 30, 1990. Twenty of Pennsylvania's 67 counties and major portions of four others are classified as labor surplus areas, as are three cities and one township in counties in which the entire county did not qualify for inclusion on the list. Most of the labor surplus areas are located in the western half of the state, where unemployment remains generally higher than in the eastern portion.

TABLE 36

CIVILIAN LABOR FORCE, EMPLOYMENT, UNEMPLOYMENT, AND UNEMPLOYMENT RATE

METROPOLITAN AREA, PENNSYLVANIA, AND UNITED STATES
1975-1988 Annual Averages

(in Thousands)

YEAR	CIVILIAN LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	RATE(%)
		METROPOLITAN AREA *		
1976	4,406.5	4,061.9	344.6	7.8
1977	4,464.4	4,123.3	341.1	7.6
1978	4,550.7	4,241.0	309.7	6.8
1979	4,582.5	4,274.2	308.2	6.7
1980	4,641.4	4,292.1	349.3	7.5
1981	4,687.6	4,308.1	379.5	8.1
1982	4,690.6	4,198.2	492.4	10.5
1983	4,707.1	4,176.1	530.9	11.3
1984	4,695.3	4,284.4	410.9	8.8
1985	4,743.2	4,380.4	362.8	7.6
1986	4,840.9	4,524.5	316.4	6.5
1987	4,857.3	4,595.4	261.8	5.4
1988	4,958.4	4,718.4	240.0	4.8
		PENNSYLVANIA		
1976	5,129.0	4,723.0	407.0	7.9
1977	5,207.0	4,806.0	401.0	7.7
1978	5,306.0	4,938.0	368.0	6.9
1979	5,360.0	4,990.0	371.0	6.9
1980	5,435.0	5,010.0	425.0	7.8
1981	5,484.0	5,026.0	459.0	8.4
1982	5,489.0	4,889.0	599.0	10.9
1983	5,505.0	4,855.0	650.0	11.8
1984	5,478.0	4,980.0	498.0	9.1
1985	5,527.0	5,084.0	443.0	8.0
1986	5,637.0	5,251.0	386.0	6.8
1987	5,655.0	5,335.0	320.0	5.7
1988	5,780.0	5,486.0	294.0	5.1
		UNITED STATES		
1976	96,158.0	88,752.0	7,406.0	7.7
1977	99,009.0	92,017.0	6,991.0	7.1
1978	102,251.0	96,048.0	6,202.0	6.1
1979	104,962.0	98,824.0	6,137.0	5.8
1980	106,940.0	99,303.0	7,637.0	7.1
1981	108,670.0	100,397.0	8,273.0	7.6
1982	110,204.0	99,526.0	10,678.0	9.7
1983	111,550.0	100,834.0	10,717.0	9.6
1984	113,544.0	105,005.0	8,539.0	7.5
1985	115,461.0	107,150.0	8,312.0	7.2
1986	117,834.0	109,597.0	8,237.0	7.0
1987	119,865.0	112,440.0	7,425.0	6.2
1988	121,669.0	114,968.0	6,701.0	5.5

* METROPOLITAN AREA is the sum of all Pennsylvania Counties located in Metropolitan Statistical Areas (MSAs).

SOURCES: Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics. Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

GRAPH 4
UNEMPLOYMENT RATES
UNITED STATES AND PENNSYLVANIA
ANNUAL AVERAGES 1978 - 1988

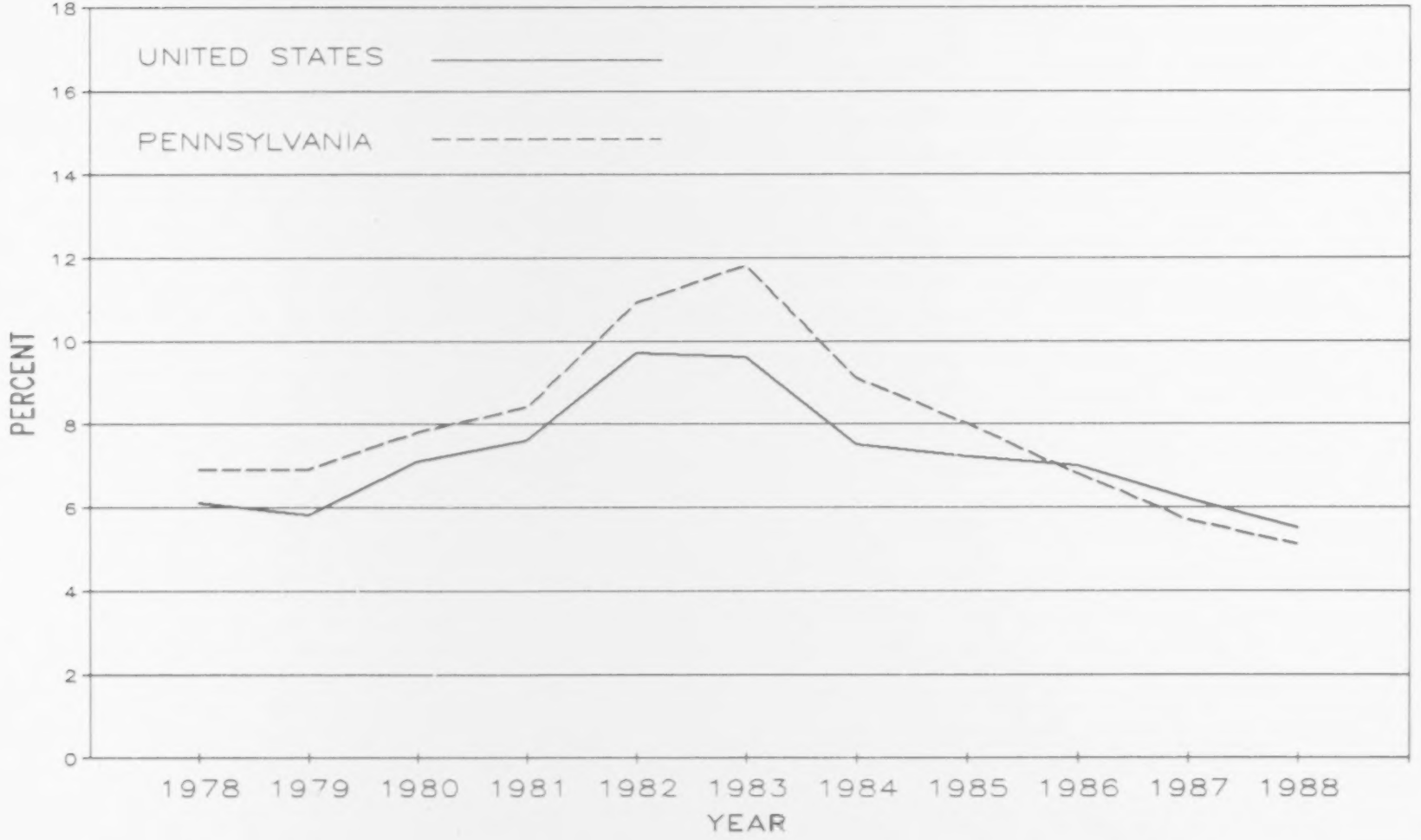

TABLE 37

PENNSYLVANIA

CHARACTERISTICS OF THE INSURED UNEMPLOYED

(Vertical Percent Distribution)

CHARACTERISTIC	1st Qtr 1988	2nd Qtr 1988	3rd Qtr 1988	4th Qtr 1988	Annual Average 1988
BOTH SEXES	100.00	100.00	100.00	100.00	100.00
Male	70.73	60.04	51.12	60.09	61.80
Female	29.27	39.96	48.88	39.91	38.20
ALL AGES	100.00	100.00	100.00	100.00	100.00
24 and under	15.26	12.03	10.05	10.78	12.45
25-34	30.77	32.91	31.66	33.71	32.08
35-44	24.40	22.84	24.23	23.57	23.83
45-54	14.47	17.21	17.75	17.76	16.51
55-64	14.56	14.11	13.84	12.63	13.89
65 and over	0.56	0.90	2.46	1.55	1.26
ALL INDUSTRIES	100.00	100.00	100.00	100.00	100.00
Manufacturing	30.87	35.65	33.96	33.85	33.26
Durable Goods	17.52	17.45	16.78	20.16	17.91
Nondurable Goods	13.34	18.20	17.18	13.69	15.36
Nonmanufacturing	69.13	64.35	66.04	66.15	66.74
Mining	1.90	2.50	1.88	1.10	1.86
Construction	26.63	16.73	9.95	15.18	18.34
Trans. & Publ. Util.	3.28	3.85	6.62	4.11	4.30
Wholesale & Ret. Trade	15.37	17.22	19.71	18.72	17.44
Fin.,Ins.,& Real Est.	2.74	3.82	4.31	3.32	3.45
Service & Misc. 1/	19.21	20.23	23.58	23.72	21.34
ALL OCCUPATIONS	100.00	100.00	100.00	100.00	100.00
Prof.,Tech.,& Mgr.	9.51	12.10	14.34	13.63	12.02
Clerical	8.24	12.37	15.27	14.72	12.07
Sales	5.03	5.96	5.74	6.76	5.76
Service	8.78	8.37	9.62	7.92	8.68
Farm.,Fish.,& For.	2.77	0.63	0.49	1.44	1.51
Processing	5.43	5.48	5.78	5.39	5.51
Machine Trades	6.67	7.57	7.86	8.27	7.47
Bench Work	9.95	10.87	12.11	10.79	10.80
Structural Work	32.29	23.04	16.56	21.19	24.43
Miscellaneous	11.31	13.62	12.23	9.89	11.74

1/ Includes Service, Government, and Miscellaneous Manufacturing.

SOURCE: "Pennsylvania Insured Unemployed", Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 38
RANKS BY UNEMPLOYMENT RATES FOR PENNSYLVANIA LABOR MARKET AREAS 1/
ANNUAL AVERAGES FOR 1987 AND 1988

AREAS	ANNUAL AVERAGE 1988 RANK	RATE	VOLUME OF UNEMP.	AREAS	ANNUAL AVERAGE 1987 RANK	RATE	VOLUME OF UNEMP.
LANCASTER MSA	1	3.5	7.7	LANCASTER MSA	1	3.9	8.1
HARRISBURG-LEBANON-CARLISLE MSA	2	4.0	12.7	HARRISBURG-LEBANON-CARLISLE MSA	2	4.1	12.7
PHILADELPHIA PMSA	3	4.1	100.0	PHILADELPHIA PMSA	3	4.4	105.6
YORK MSA	4	4.3	9.3	YORK MSA	4	4.6	9.6
ALLENTOWN-BETHLEHEM MSA	5	4.4	14.3	DUSHORE-LAPORTE LMA	5	4.7	0.1
CHAMBERSBURG-WAYNESBORO LMA	5	4.4	2.7	READING MSA	6	4.9	8.3
READING MSA	5	4.4	7.6	ALLENTOWN-BETHLEHEM MSA	7	5.0	16.1
DUSHORE-LAPORTE LMA	8	4.6	0.1	CHAMBERSBURG-WAYNESBORO LMA	7	5.0	3.0
SAYRE-ATHENS-TOWANDA LMA	9	4.8	1.5	HONESDALE-MATAMORAS LMA	9	5.3	1.6
WARREN LMA	10	4.9	1.1	STATE COLLEGE MSA	10	5.5	3.3
HONESDALE-MATAMORAS LMA	11	5.0	1.6	SAYRE-ATHENS-TOWANDA LMA	10	5.5	1.6
STATE COLLEGE MSA	11	5.0	3.1	WILLIAMSPORT MSA	12	5.6	3.2
PENNSYLVANIA		5.1	294.0	PENNSYLVANIA		5.7	320.0
SHARON MSA	13	5.1	2.6	SUNBURY-SHAMOKIN-MT. CARMEL LMA	13	6.2	5.4
WILLIAMSPORT MSA	14	5.3	3.2	UNITED STATES		6.2	7425.0
UNITED STATES		5.5	6701.0	WARREN LMA	14	6.3	1.3
ST. MARYS-EMPORIUM LMA	15	5.6	1.1	BUTLER LMA	15	6.4	4.5
BUTLER LMA	16	5.8	4.2	COUDERSPORT LMA	16	6.5	0.5
PITTSBURGH PMSA	16	5.8	55.5	WELLSBORO LMA	16	6.5	1.1
WELLSBORO LMA	18	5.9	1.1	NEW CASTLE LMA	18	6.6	2.9
ERIE MSA	19	6.0	7.8	PITTSBURGH PMSA	19	6.7	63.4
FOREST CITY-MONTROSE LMA	19	6.0	1.1	SHARON MSA	19	6.7	3.3
NEW CASTLE LMA	19	6.0	2.8	ST. MARYS-EMPORIUM LMA	21	6.8	1.3
SCRANTON--WILKES-BARRE MSA	19	6.0	21.5	SCRANTON--WILKES-BARRE MSA	22	6.9	24.1
SUNBURY-SHAMOKIN-MT. CARMEL LMA	23	6.1	5.6	FOREST CITY-MONTROSE LMA	23	7.1	1.2
COUDERSPORT LMA	24	6.2	0.5	POTTSVILLE LMA	23	7.1	5.1
BRADFORD LMA	25	6.5	1.3	ALTOONA MSA	25	7.2	4.2
POTTSVILLE LMA	25	6.5	4.7	ERIE MSA	25	7.2	9.2
MEADVILLE LMA	27	6.8	2.7	BRADFORD LMA	27	7.5	1.5
OIL CITY LMA	27	6.8	1.9	LEWISTOWN LMA	28	7.8	2.3
ALTOONA MSA	29	6.9	4.1	BEDFORD LMA	29	8.0	1.6
LEWISTOWN LMA	30	7.3	2.3	MEADVILLE LMA	29	8.0	3.1
LOCK HAVEN-RENOVO LMA	30	7.3	1.1	OIL CITY LMA	31	8.1	2.2
JOHNSTOWN MSA	32	7.4	7.0	JOHNSTOWN MSA	32	8.3	7.8
CLARION LMA	33	8.2	1.4	LOCK HAVEN-RENOVO LMA	33	9.0	1.4
KITTANNING-FORD CITY LMA	33	8.2	2.3	DUBOIS-PUNXSUTAWNEY LMA	34	9.2	5.0
HUNTINGDON LMA	35	8.3	1.5	INDIANA LMA	34	9.2	3.3
BEDFORD LMA	36	8.4	1.7	CLARION LMA	36	9.4	1.6
DUBOIS-PUNXSUTAWNEY LMA	37	8.5	4.7	KITTANNING-FORD CITY LMA	37	9.5	2.6
BEAVER COUNTY PMSA	38	9.1	5.5	HUNTINGDON LMA	38	9.6	1.7
INDIANA LMA	39	9.3	3.3	BEAVER COUNTY PMSA	39	9.8	6.1
WAYNESBURG LMA	40	11.1	1.5	WAYNESBURG LMA	40	13.3	1.7

1/ All data are on 1988 benchmarks.
Rates are computed using unrounded data.
U.S. and Pennsylvania included for comparative purposes.
SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry

TABLE 39

PENNSYLVANIA LABOR SURPLUS AREAS
ELIGIBLE FOR FEDERAL PROCUREMENT PREFERENCE
FROM OCTOBER 1, 1989 THROUGH SEPTEMBER 30, 1990

Counties

Armstrong County	Fayette County	Juniata County
Beaver County	Forest County	Mifflin County
Bedford County	Fulton County	Northumberland County
Clarion County	Greene County	Somerset County
Clearfield County	Huntingdon County	Venango County
Clinton County	Indiana County	Washington County
Crawford County	Jefferson County	

Balance of Counties

Balance of Cambria County	-	Cambria County less Johnstown City
Balance of Erie County	-	Erie County less Erie City and Millcreek Township
Balance of Luzerne County	-	Luzerne County less Hazleton and Wilkes-Barre Cities
Balance of Westmoreland County	-	Westmoreland County less Hempfield and North Huntingdon Townships

Cities and Townships

Johnstown City	-	in Cambria County
McKeesport City	-	in Allegheny County
North Huntington Township	-	in Westmoreland County
Wilkes-Barre City	-	in Luzerne County

The above areas have been classified by the U.S. Department of Labor as labor surplus areas for purposes of Defense Manpower Policy No. 4B (DMP-4B) and Executive Order 12073 and 10582 (implementing the Buy American Act). Employers in such designated areas are eligible for preference in bidding on Federal procurement contracts under these Acts or Orders.

To be classified as a labor surplus area a city or township must have (1) a population of 25,000 or more in the 1980 Census or in any offical annual updates of census estimates and (2) have an unemployment rate of 1.2 times the national average during the reference period. Counties or balance of counties (counties less areas of 25,000 population), regardless of population size, that have unemployment rates of 1.2 times the national average during the reference period are also classified as labor surplus areas. If 1.2 times the national average during the reference period is 10.0% or greater, an area whose unemployment rate is 10.0% or greater during the same period will be classified as a labor surplus area. The reference period is determined by the U.S. Department of Labor, Employment and Training Administration and currently is January 1987 through December 1988.

An area can also be classified as a labor surplus area due to exceptional circumstances if the area experiences a significant rise in its unemployment rate that reaches 1.2 times the current national unemployment rate. This rise in the unemployment rate should be expected to last at least one year and to stay at a level high enough to meet the eligibility criteria under which the area was classified.

SOURCE: Area Trends in Employment and Unemployment, U.S. Department of Labor, Employment and Training Administration, October, 1989.

SECTION VII

POPULATIONS WITH SPECIAL EMPLOYABILITY PROBLEMS

The unemployed are not a homogeneous group. Their circumstances and problems vary from the regular, predictable, and short-term unemployment of those who work in seasonal jobs to the almost insurmountable difficulties of unskilled workers with drug or alcohol problems and a poor work history. Many of the unemployed need little more than the services of an employment agency to find another job, but many others face joblessness with the added handicaps of other problems that reduce their employability and make it more difficult to find suitable work. Poverty, single parenthood, physical or mental handicap, drug or alcohol abuse, lack of education, a prison record, or the simple misfortune of having worked in an industry that is now on the decline all complicate the search for an adequate job.

Much unemployment is of short duration; workers are laid off for a few weeks when business is slow, then recalled when the situation improves. Or, a worker quits one job and finds another within a few weeks or months. However, the long-term unemployed often have more intractable employability problems. People with a work-related disability are restricted in the types of work they are capable of performing. Table 40 provides statistics on these and other groups of people with special employability problems.

In Pennsylvania there were 2,104,300 persons classified as economically disadvantaged in 1987. About one-third of them were children under the age of 16, but more than 12 percent were between ages 16 and 21, and another 17 percent were 55 years of age or older. These people are not only from the lowest socio-economic group, but also have the added disadvantage of being young with few skills and little work experience, or middle-aged or older and often regarded as too old for retraining. Closely related to the group of young economically disadvantaged persons and often overlapping with it, are large numbers of high school dropouts and teenage mothers. More than 23,600 young people dropped out of high school in the state in the 1987-1988 school year. Many of the older workers entering the job market are displaced homemakers, and in 1988 there were 331,000 such persons in the labor force in Pennsylvania. Single parents often have particularly difficult employment problems because they are usually young with few salable skills, and they are often high school dropouts and/or displaced homemakers as well. There were 253,947 single parents in the 1980 census, nearly 87 percent female. More than 689,500 Pennsylvania residents received cash welfare payments in 1988, and more than 534,000 received Aid to Families with Dependent Children (AFDC) each month. In 1988, more than 83,000 persons, about 28 percent of all unemployed, were out of work for more than 15 weeks. During 1988, there were 75,500 persons who exhausted all of their unemployment compensation benefits before finding a job. In any single month of the year there were 32,800 such exhaustees unemployed and looking for work.

The U.S. Office of Management and Budget sets annual income levels to define poverty in the United States. These income criteria are given in Table 41. A family of four whose annual income is below $12,100 is considered to be living in poverty. A person is classified as economically disadvantaged if

he or she is a member of a family receiving cash welfare payments, or has a family income below the national poverty level or below 70 percent of the Lower Living Standard Income Level (LLSIL) set by the U.S. Employment and Training Administration, whichever is higher. The poverty level criterion is uniform throughout the continental United States, but the LLSIL varies for individual states and major metropolitan areas. In Pennsylvania, there are separate LLSIL figures for the Philadelphia and Pittsburgh PMSAs; there is also an LLSIL for the remaining metropolitan statistical areas and another for non-metropolitan areas.

TABLE 40

PENNSYLVANIA

POPULATIONS WITH SPECIAL EMPLOYABILITY PROBLEMS

Economically Disadvantaged, Total (1987) 1/	2,104,300
16-21 years of age	263,100
22-54 years of age	767,500
55+ years of age	367,600
Dislocated Workers (1988 Annual Average) 1/	90,600
Persons 16-64 With a Work Disability (1980 Census)	642,761
Male	328,524
Female	314,237
High School Dropouts (1987-88 School Year) 2/	23,610
Teenage Mothers (1988) 3/	34,560
Displaced Homemakers (1988) 1/	331,000
Single Parents (1980 Census)	253,947
Male	34,040
Female	219,907
Average Monthly Number of Persons Receiving Cash Welfare Assistance - 1988 4/	689,564
Average Monthly Number of Persons Receiving Aid to Families with Dependent Children (AFDC) - 1988 4/	534,007
Long-Term Unemployed (15+ Weeks) - 1988 1/	83,000
1988 Unemployment Rate (All Persons)	5.1%
1988 Unemployment Rate (Long-Term)	1.4%
Long-Term as a Percentage of Total Unemployed	28.2%
Total Persons Exhausting U.C. Benefits While Fully Unemployed (1988) 1/	75,500
Average Monthly Unemployed Exhaustees (1988) 1/	32,800

See definitions on next page.

1/ SOURCE: Bureau of Research and Statistics, Pennsylvania Department of Labor and Industry.

2/ SOURCE: Public School Dropout Report 1987-88, Pennsylvania Department of Education.

3/ SOURCE: Pennsylvania Department of Health.

4/ SOURCE: Cash Assistance Statistics, Pennsylvania Department of Public Welfare.

TABLE 40

PENNSYLVANIA

POPULATIONS WITH SPECIAL EMPLOYABILITY PROBLEMS

DEFINITIONS

ECONOMICALLY DISADVANTAGED PERSON - A member of a family that receives cash welfare payments or whose family income does not exceed the poverty level or exceed 70 percent of the lower living standard income level, whichever is higher.

DISLOCATED WORKER - A person who has been, or will soon be, terminated or laid-off from employment and is unlikely to return to his/her previous industry or occupation; or, if currently employed, earns a rate not greater than one-half of their previous hourly rate, but less than $4.50 per hour.

PERSON WITH A WORK DISABILITY - A person who has a physical, mental, or other health condition which has lasted for six months or more.

HIGH SCHOOL DROPOUTS - Students who fall into 1 of 4 categories:
Left school after passing required attendance age;
Left after issued a General Employment Certificate;
Left after issued a Farm or Domestic Service Exemption Permit;
Left after being committed to a correctional institution.

TEENAGE MOTHERS - Mother under age 20.

DISPLACED HOMEMAKER - An individual who (a) has not worked in the labor force for a number of years but has, during those years, worked in the home providing unpaid services for family members; (b) has had the source for the income that supported the family removed; and (c) is experiencing difficulty obtaining or upgrading employment.

PERSONS RECEIVING CASH ASSISTANCE - Persons who receive monetary aide under AFDC, General Assistance, or other cash subsistence programs operated through the Department of Public Welfare.

LONG-TERM UNEMPLOYED - Persons unemployed for 15 weeks and over.

TOTAL PERSONS EXHAUSTING U.C. BENEFITS WHILE FULLY UNEMPLOYED - The sum of all people who have exhausted unemployment compensation benefits during the reference year and had no income during the final compensation week for which they received U.C. benefits.

AVERAGE MONTHLY UNEMPLOYED EXHAUSTEES - An average by month of all unemployed exhaustees. Total persons exhausting U.C. benefits does not equal 12 times the average monthly unemployed for several reasons, such as exhaustees being counted in more than one month, and persons being counted who have exhausted benefits in prior years and who are still unemployed in the reference year.

TABLE 41

U.S. OFFICE OF MANAGEMENT AND BUDGET
ANNUAL INCOME AND POVERTY LEVEL CRITERIA FOR CONTINENTAL U.S.

FAMILY SIZE	Effective Date			
	Feb 1989	Feb 1988	April 1987	April 1986
1	$ 5,980	$ 5,700	$ 5,500	$ 5,360
2	8,020	7,730	7,400	7,240
3	10,060	9,690	9,300	9,120
4	12,100	11,650	11,200	11,000
5	14,140	13,610	13,100	12,880
6	16,180	15,570	15,000	14,760
7	18,220	17,530	16,900	16,640
8	20,260	19,490	18,800	18,520
EACH ADDITIONAL MEMBER	2,040	1,960	1,900	1,880

U.S. EMPLOYMENT AND TRAINING ADMINISTRATION
1989 LOWER LIVING STANDARD INCOME LEVEL

FAMILY SIZE	Philadelphia PMSA		Pittsburgh PMSA	
	100%	70%	100%	70%
1	$ 7,390	$ 5,170	$ 6,770	$ 4,890
2	12,100	8,470	11,440	8,010
3	16,610	11,630	15,700	10,990
4	20,510	14,360	19,390	13,570
5	24,200	16,940	22,870	16,010
6	28,310	19,820	26,760	18,730
7	32,430	22,700	30,640	21,450
8	36,540	25,580	34,530	24,170
EACH ADDITIONAL MEMBER	4,110	2,880	3,890	2,720

Balance of Pennsylvania

FAMILY SIZE	Metropolitan Area		Non-Metropolitan Area	
	100%	70%	100%	70%
1	$ 7,500	$ 5,250	$ 7,370	$ 5,160
2	12,290	8,600	12,070	8,450
3	16,860	11,800	16,590	11,610
4	20,810	14,570	20,470	14,330
5	24,560	17,190	24,160	16,910
6	28,730	20,110	28,260	19,780
7	32,900	23,030	32,360	22,650
8	37,070	25,950	36,460	25,520
EACH ADDITIONAL MEMBER	4,170	2,920	4,100	2,870

SOURCE: Federal Register, February and May, 1989, U.S. Department of Labor

SECTION VIII

APPENDIX

A. Concepts and Definitions

Applicants - Persons registered at the local employment service offices and are reasonably representative of the available worker supply in most occupational categories and for most sections of the state. These jobseekers comprise an estimated 70 percent of all workers in the area suffering a spell of unemployment each year, as well as labor force entrants and currently employed workers seeking a job change.

Average Hourly Earnings - The total money earnings for each hour worked or paid for including not only basic hourly and incentive wages, but also premium pay for overtime and late shift work.

Average Weekly Earnings - Amount computed by multiplying average hourly earnings by average weekly hours worked.

Civilian Labor Force - The sum of persons 16 years of age and older who are employed (exclusive of the Armed Forces), unemployed, or directly involved in labor-management disputes.

Dislocated Workers - Those individuals in the labor force who have been laid off and are not likely to return to their previous jobs. Individuals who have dropped out of the labor force, i.e., not actively seeking work, are not counted as dislocated workers.

Durable Goods - Goods also known as "hard goods", refer to manufactured or processed items generally considered to have a normal life expectancy of three years of more. The durable goods manufacturing industries are lumber and wood, furniture, stone, clay, glass, primary and fabricated metals, electrical and non-electrical machinery, transportation equipment, instruments and miscellaneous manufacturing.

Economically Disadvantaged Person - A member of a family that receives cash welfare payments or whose family annual income does not exceed the poverty level or exceed 70 percent of the lower living standard income, whichever is higher.

ESARS - Acronym for Employment Security Automated Reporting System for reporting and compiling characteristics of job applicants and job orders and activities performed by Employment Service offices.

Hispanic - Persons of Mexican, Puerto Rican, Cuban, Central or South American, or some other Spanish origin.

Job Bank - The Job Bank is a computerized listing of the job openings placed by employers with OES. The listings come both alphabetically and by D.O.T. code. This service is provided at no cost to either employers or applicants. In addition to computer printouts, most OES local offices are equipped with

film readers to assist applicants in locating a job for which they are qualified. An ES Specialist will interview the applicant, and if the applicant is qualified, phone the employer to arrange for an interview. This is the referral process and, if the applicant is hired, it is a placement.

Job Training Partnership Act (JTPA) - The Act that replaced the Comprehensive Employment and Training Act (CETA). JTPA seeks to train disadvantaged groups in marketable skills. Target groups can include: economically disadvantaged, physically handicapped, school dropouts, long-term dislocated workers unemployed, and teen parents.

Labor Market Area (LMA) - Defined as a county or group of counties having a central city without regard to population size. A labor market area is an economically integrated unit within which workers may readily change jobs without changing their place of residence. The area generally takes the name of the central city. The boundaries depend primarily on economic and geographic factors, and not on political jurisdiction. MSAs are literally large labor market areas.

Metropolitan Statistical Area (MSA), (PMSA) - MSAs and PMSAs are relatively large labor market areas. They are defined as a county containing either a city with a population of at least 50,000 or a U.S. Bureau of Census designated urbanized area of at least 50,000. The labor market concept takes into consideration the total local area where job transactions occur, e.g., persons residing in the labor market area can obtain employment anywhere in the area without changing their place of residence.

Minority - Those persons who are non-white, of Spanish heritage or have other characteristics which pose a barrier to employment.

Nonagricultural Wage and Salary Employment - State nonagricultural wage and salary employment statistics are based primarily on survey data collected from a sample of employers, representing 64 percent of employment in the state's manufacturing industries and 38 percent in nonmanufacturing industries.

Nonagricultural wage and salary employment refers only to employes on establishment payrolls during the sample week in each month (week including the 12th), and excludes the self-employed, unpaid family workers, domestic workers and agricultural workers, but includes workers involved in labor-management disputes. Nonagricultural wage and salary employment figures relate to place of work of the workers and not to their place of residence. To the extent that multiple job holding exists during the payroll period, the payroll records may count a person more than once. In addition, the payroll data include commuters who live outside the state, but not persons who commute to work outside the state.

Nondurable Goods - Known as "soft goods", refer to manufactured or processed items generally considered to last for a short time - less than three years. The nondurable manufacturing industries include food, tobacco, textiles, apparel, paper, printing, chemicals, petroleum, rubber and leather.

Vietnam-Era Veteran - A person who (1) served on active duty for a period of more than 180 days, any part of which occurred during the Vietnam-Era (August 5, 1964 through May 7, 1975), and was discharged or released therefrom with other than a dishonorable discharge, or (2) was discharged or released from active duty due to a service-connected disability if any part of such active duty was performed during the Vietnam Era.

Not in Labor Force - If a person is not working, not looking for work, not involved in a labor-management dispute, and not on unpaid absence from a job, or if he is under age 16, then the person is not in the labor force. Housewives, students, retirees, and children constitute the largest body of persons not in the labor force. Welfare recipients, if neither looking for work nor holding a job, are not in the labor force. Persons who may wish to work, but because of disability cannot work, are also not in the labor force.

Per Capita Income - Total income of an area divided by total population of that area.

Personal Income - All current income before taxes but excluding personal contributions for social security insurance.

Placement - When the local employment service office, which has an employer job order, refers an acceptable applicant to the employer, and verifies the fact that the applicant has been hired by the employer.

Private Industry Council (PIC) - Councils, composed of local business people and corporation officials, and formed to develop and control JTPA programs.

Seasonally Adjusted Data - Data which excludes the effects of seasonal variations. Economic time series are generally subject to regular intra-yearly movements comprised of social customs, production changes, and climatic conditions which tend to repeat themselves annually in a given locality, i.e., graduating students in June or increased retail employment in December. When a ratio-to-moving-average method (developed by the U.S. Department of Labor) is used to remove seasonal influences, a reliable trend is obtained for analysis.

Seasonal Employment - Employment that is affected by climatic conditions, social customs and/or production changes.

Service Delivery Area (SDA) - A designated geographic area instituted under JTPA, to assist in the administration and management of the JTPA programs.

Unemployment - State unemployment statistics are obtained as part of the National Current Population Survey (CPS). This is a monthly survey of about 71,000 households throughout the Nation of which 3,100 are in Pennsylvania. It is conducted by the U.S. Bureau of Census for the U.S. Department of Labor.

Unemployed Persons - Persons who did not work during the survey week, who made specific efforts to find a job within the past four weeks, and who were available for work during the survey week (except for temporary illness). Also included as unemployed are those who did not work at all, were available for work, and (a) were waiting to be called back to a job from which they had been laid off; or (b) were waiting to report to a new wage or salary job within 30 days.

Unemployment Rate - The number of unemployed as a percent of the total civilian labor force. The rate is based on unrounded data although rounded data may be published.

SECTION VIII

APPENDIX

B. Sources of Information

1980 Census of Population and Housing,
PHC80-V-1, United States

1980 Census of Population and Housing,
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U.S. Department of Commerce, Bureau of Economic Analysis

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Employment and Earnings, March 1979 and March 1989,
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